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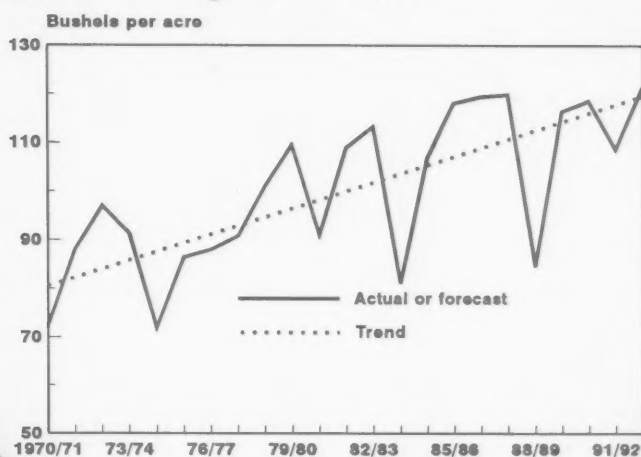
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Feed

Situation and Outlook Report

National Average Corn Yields



**Corn Yields Forecast
at Record 121.3
Bushels Per Acre**

Contents

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Summary	3
Feed Grain Supply and Use	4
Corn	5
Sorghum	7
Barley	8
Oats	9
Hay	11
Feed Demand	13
Food, Seed, and Industrial Use of Corn	15
Transportation Update	17
World Coarse Grain Outlook	21
List of Tables and Figures	27

Situation Coordinator

Thomas Tice (202)219-0840

Principal Contributors

Allen Baker (202)219-0840

Jim Cole (202) 219-0840

T.Q. Hutchinson (202) 219-0840

Peter Riley (202) 219-0824

Larry Van Meir (202) 219-0840

Jenny Gonzales (202) 219-0840

Graphics

Marilyn Curtis (202) 219-0840

Word Processing

Carolyn Liggon (202) 219-0840

Summary

Record Feed Grain Yields Forecast for 1992/93

U.S. feed grain yields for 1992/93 are forecast at a record 2.65 tons per acre, eclipsing the previous record of 2.58 tons set 2 years ago. The record yield and a 5 percent gain in harvested area are expected to boost feed grain output to 256.3 million tons, up 17.5 percent from last year. Corn yields are forecast at a record 121.3 bushels per acre. Favorable conditions have also improved sorghum yield prospects, with the forecast of 67.7 bushels per acre second only to the 1987 record of 69.4. Oats and barley yields are forecast to exceed their previous 5 year average by 5.9 and 4.0 bushels per acre, respectively, to 57.6 and 54.1 bushels per acre.

While 1992/93 feed grain supplies are forecast up 9 percent, the lowest carryin stocks since 1976/77 will keep supplies well below the levels of the mid-1980's. Although larger supplies and lower prices will promote higher use, carryout is projected almost 19 million tons higher at 53.5 million.

Above-normal rainfall and below-normal temperatures during July led to a dramatic turnaround in crop conditions in major corn producing states. Corn production, at 8.762 billion bushels, is forecast up 17 percent from last year, just shy of the record 8.875 billion in 1985/86. While 1992/93 corn supplies will be up 9 percent from a year ago, carryin stocks of just under 1.1 billion

will keep supplies well below the 12 billion bushels in 1987/88. With larger supplies, prices received by farmers are forecast to average between \$1.85 and \$2.25 per bushel, compared to \$2.37 for 1991/92.

With lower corn prices and larger meat and milk production, feed and residual use of corn is forecast at a record 5 billion bushels. Food, seed, and industrial use and exports are forecast up slightly, thus ending stocks are forecast up around 700 million bushels to the highest since 1988/89.

With bumper crops forecast to be harvested this fall, concern over storage

and transportation will likely arise. However, while some temporary local problems could develop, transportation supplies and storage capacity are expected to be adequate.

Global coarse grain supplies are expected to increase around 1 percent in 1992/93, while use is forecast to decline slightly. Lagging consumption in the former Soviet Union and Eastern Europe account for much of the decline. As a result, world coarse grain stocks are forecast to increase to their highest level since 1988/89. Although world trade in coarse grains is forecast to decline 7 percent, U.S. exports are forecast up slightly in 1992/93.

FEED GRAIN SUMMARY

Year 1/	88/89	89/90	90/91	91/92	92/93	Record prod. 2/ 85/86	Lowest stocks 2/ 75/76
TOTAL FEED GRAINS							
	Million acres					Mil. acres	
Planted	101.8	106.1	103.4	104.6	108.6	128.0	122.6
Harvested	80.6	91.0	89.5	91.9	96.6	111.7	104.7
Yield, ton/ac	1.85	2.43	2.58	2.38	2.65	2.46	1.77
	Million metric tons					Mil. metric tons	
Beg. stocks	133.6	65.9	45.5	47.7	34.7	57.5	21.1
Production	149.3	221.0	230.5	218.2	256.3	274.3	185.1
Supply	284.2	288.2	277.3	268.0	292.7	332.6	206.5
Dom. Disp.	157.2	173.0	178.1	184.1	189.0	170.0	133.7
FSI	38.7	40.3	40.5	42.5	43.1	35.0	17.9
Feed/res.	118.5	132.7	137.6	141.6	146.0	135.1	115.8
Exports	61.1	69.7	51.5	49.2	50.2	36.1	48.8
End. stocks	65.9	45.5	47.7	34.7	53.5	126.4	23.9
SECTOR							
	Corn		Sorghum		Barley		Oats
Year 1/	91/92	92/93	91/92	92/93	91/92	92/93	91/92 92/93
	Million acres						
Planted	76.0	79.3	11.0	13.5	8.9	7.8	8.7 8.0
Harvested	68.8	72.2	9.8	12.3	8.4	7.3	4.8 4.8
Yield, bu/ac	108.6	121.3	59.0	67.7	55.2	54.1	50.6 57.6
	Million bushels						
Beg. stocks	1,521	1,096	143	88	135	130	171 127
Production	7,474	8,762	579	834	464	395	243 276
Supply	9,016	9,868	722	921	624	545	489 468
Dom. disp.	6,345	6,465	354	485	400	340	360 350
FSI	1,445	1,465	9	10	171	170	125 130
Feed/res.	4,900	5,000	345	475	229	170	235 220
Exports	1,575	1,600	280	300	95	90	2 1
End. stocks	1,096	1,803	88	136	130	115	127 117
Stocks-use ratio, %	13.8	22.4	13.9	17.4	26.3	26.7	35.0 33.4
Avg. farm price, \$/bu	2.37	1.85-2.25	2.28	1.75-2.15	2.10	1.90-2.30	1.20 1.10-1.50

1/ Corn and sorghum, September/August; barley and oats, June/May.

2/ Based on corn since 1975/76.

Feed Grain Production Rebounds on Record Yields

The August forecast of feed grain output for 1992/93 of 256.3 million tons is up 17.5 percent from last year, due largely to record yields of 2.65 tons per acre. This would be the next largest crop on record, second only to 1985/86's output of 274.3 million tons.

Larger Harvested Area Contributes to Higher Output

Lower program set-aside requirements for corn and sorghum, and fewer base acres flexed to other crops boosted feed grain plantings in 1992/93. Total plantings of 108.6 million acres are up 3.8 percent from a year ago, while harvested area is forecast to increase over 5 percent to 96.6 million acres. All the increase in the forecast of harvested area is due to corn and sorghum. Harvested area for barley is forecast down 1.1 million acres, and oats harvested is virtually unchanged from a year ago.

U.S. feed grain yields for 1992/93 are forecast at a record 2.65 tons per acre, eclipsing the previous record of 2.58 tons set 2 years ago. The record yield is expected to boost feed grain output to 256.3 million tons, up 17.5 percent from last year. Corn yields are forecast at a record 121.3 bushels per acre, 1.5 above the previous record set in 1987/88. Favorable growing season weather has also improved sorghum yield prospects with the average forecast at 67.7 bushels

per acre, second only to 1987's record of 69.4. Oats and barley yields are forecast to exceed their previous 5 year average by 5.9 and 4.0 bushels per acre, respectively, to 51.7 and 54.1 bushels per acre.

Feed Grain Supplies Higher on Large Production

Feed grain carryin stocks of 34.7 million tons is the lowest since 1976/77, and 13 million tons below the previous year. With feed grain production forecast at 256.3 million tons, supplies for 1992/93 will increase 9 percent to 292.7 million tons. Although this is the largest supplies since 1987/88, feed grain supplies exceeded 300 million tons four of the seven years between 1981/82 and 1987/88, inclusive.

Feed Grain Use to Rise

Total use of feed grains is forecast to increase 2.6 percent during 1992/93, largely because of increased feed and

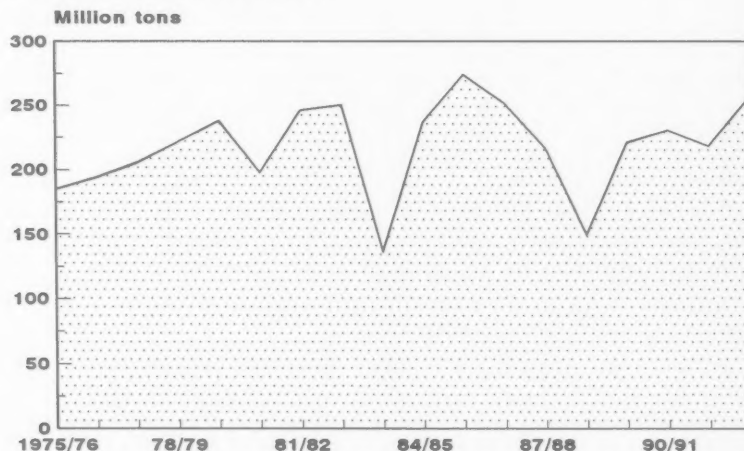
residual use. Feed and residual use is forecast at 146 million tons, up 4.4 million from 1991/92. Increases in both meat and milk production are expected to contribute to increased feed use. Food, seed, and industrial uses are forecast up only 0.6 million tons to 43.1 million, while forecast exports reach 50.2 million tons, up just 1 million tons from last year.

Forecast use of feed grains is 19 million tons short of production plus imports. Thus, ending stocks for 1992/93 are forecast to rise a corresponding amount to 53.5 million tons. This would represent 22.4 percent of total use, up from 14.9 percent for 1991/92.

Higher carryout stocks are expected to weigh on prices during 1992/93. Prices received by farmers for corn are forecast to average between \$1.85 to \$2.25 per bushel, compared with 1991/92's forecast of \$2.37.

[Tom Tice, (202) 219-0840]

Figure 1
Feed Grain Production



Forecast Record Corn Yield Follows July Rains

Above normal July precipitation in the major corn growing regions and mild temperatures improved production prospects following a dry, cool June. Corn yields, at 121.3 bushels per acre, are forecast to be a new record, eclipsing the 1987 record by 1.5 bushels.

A Roller Coaster Season

The 1992/93 growing season has been a series of ups and downs. The crop got off to a good start with over 90 percent of the crop planted by May 17, the fastest planting progress in over 4 years. In the northern states of Minnesota, Wisconsin, and Michigan, planting was 80 percent complete, 6 percent ahead of normal for mid-May.

While planting generally proceeded ahead of schedule, dry conditions through most of June heightened concerns for another year of below average yields. In Iowa and Illinois, the top two producing states, June rainfall was approximately 40 percent of normal in each state, and this followed May precipitation which was 40 and 19 percent of normal, respectively. While June is normally the period when much of the vegetative growth occurs, cool temperatures, combined with the lower rainfall, retarded crop development. On July 11, only 30 percent of the crop had begun to silk, compared with a yearly average of 49 percent.

Concerns about a widespread drought were squelched by above normal precipitation in most major corn growing areas in July. Iowa and Illinois accumulations were 66 and 72 percent above normal, respectively. Rainfall in most areas of the two-state region was sufficient to replenish short subsoil moisture as well. Further, other major corn producing states also experienced above normal precipitation and below normal temperatures during July. As a result, crop conditions improved consistently through July, leading to the forecast of record U.S. corn yields for 1992/93.

Corn Supplies for 1992/93 Reach Nearly 10 Billion Bushels

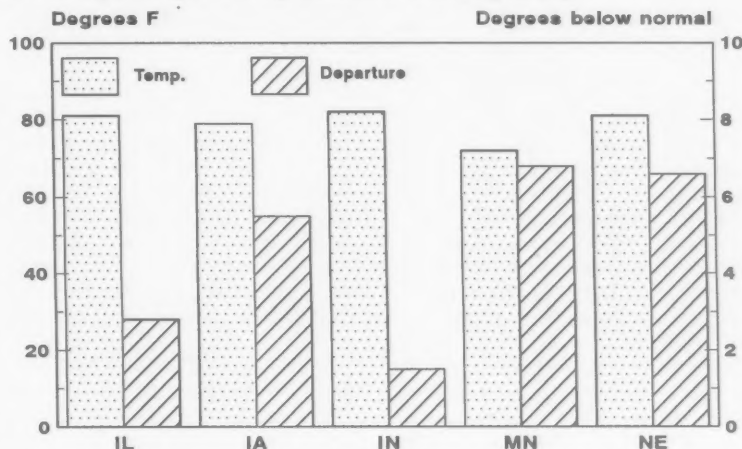
Record corn yields and a 3.5-million-acre increase in harvested area from a year ago are forecast to produce an 8.762 billion bushel crop, just shy of the

record 1985 crop of 8.875 billion. Although production is up 17 percent, corn supplies of 9.9 billion bushels are up just 9 percent from last year, due to rela-

tively low carrying stocks. Record corn supplies of 12.3 billion bushel occurred in 1987/88.

Figure 2

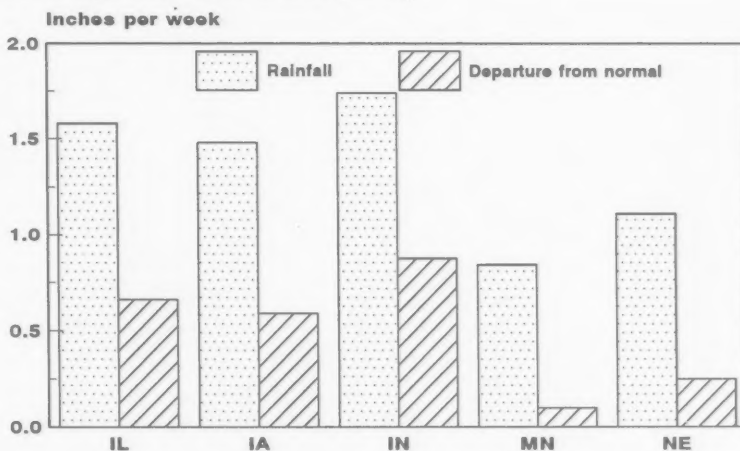
Average High Temperature During July



Average of weekly data for weeks ending July 4 through August 1.

Figure 3

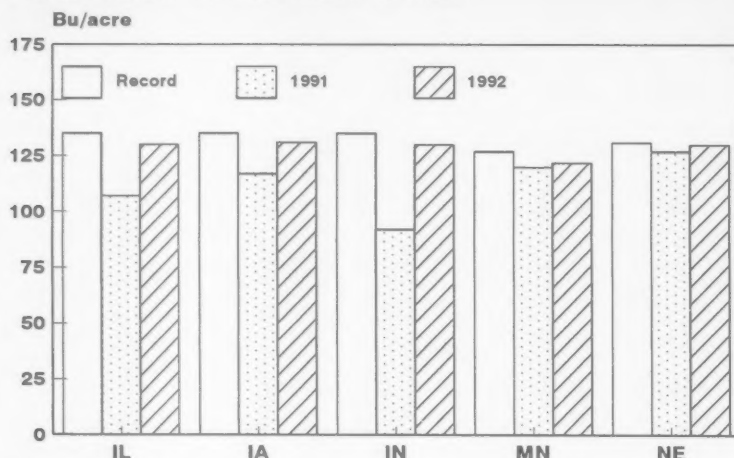
Average Rainfall During July



Average of weekly data for weeks ending July 4 through August 1.

Figure 4

Corn Yields for Selected States



Record corn yields were set during 1985 and 1986 in IL and during 1986 in IA.
Record corn yields were set during 1987 in IN, MN, and NE.

Corn Use Expected To Rise

With an 850 million bushel year-to-year increase in supplies, disappearance of corn in 1992/93 is expected to rise as prices remain below year earlier levels. Feed use is projected at 5 billion bushels, up 100 million to a new record. Food, seed and industrial (FSI) use is also projected higher at 1.465 billion bushels, representing over 18 percent of total use. Lower corn prices are expected to improve export demand to 1.6 billion bushels, up 25 million from the forecast 1991/92 level.

With both FSI and feed and residual use increasing in 1992/93, total domestic disappearance is forecast at 6.465 billion bushels, or 80 percent of total use. This would represent the highest percent of total use during the 1975/76-1992/93 period.

Ending Stocks Build; Prices Recede

Although total use of corn is projected to approach 8.1 billion bushels, carryout stocks for 1992/93 will rise to over 1.8 billion from just under 1.1 billion for

1991/92. This level of carryout represents 22.4 percent of total use versus 13.8 percent for 1991/92. This will weigh on prices received by farmers, which are expected to average between \$1.85 and \$2.25 per bushel, down from \$2.37 per bushel estimated for 1991/92.

Third Quarter 1991/92 Corn Use Above Year Ago

Third quarter total disappearance of corn is estimated at 1,827.8 million bushels as June 1 stocks were reported at 2,738.6 million. The largest year-over-year gain was attributed to feed and residual use, which reached 1,075.5 million bushels, up 100 million from the same quarter a year ago. FSI use increased over 3 percent to 380.9 million bushels.

While domestic use of corn improved from last year, exports continued to lag. During the March-May period, corn exports totalled just 371.5 million bushels, 82.1 million bushels below the same period last year. A large part of the weaker exports are attributed to slow sales to the former Soviet Union, which were down 80 million bushels.

Farm Prices Stable During March-May Quarter

During a normal (nondrought) year, corn prices generally rise in the winter and spring months to a seasonal peak in June. However, in 1991/92, average prices received by farmers remained near \$2.48 per bushel in April, May, and June, after peaking at \$2.49 in March. A lower set-aside requirement and less corn base acres flexed to other crops resulted in higher corn planting intentions by farmers for 1992/93. Farmers' larger planting intentions were indicated in the March *Prospective Plant-*

Table 1--Corn supply, disappearance, and stocks, March-May

Item	1990/91	1991/92
Million bushels		
Supply:		
Beginning stocks, March 1:		
CCC	4,789.0	4,561.0
FOR	195.6	199.2
Loan	358.1	0.6
Free	917.4	835.0
	3,317.9	3,526.2
Imports	0.8	5.4
Total	4,789.8	4,566.4
Disappearance:		
Food, seed, & industrial	368.7	380.9
Exports	453.6	371.5
Feed and residual	975.5	1,075.5
Total	1,797.8	1,827.8
Ending stocks June 1:		
CCC	435.9	147.2
FOR	29.0	0.2
Loan	638.9	589.3
Free	1,888.1	2,001.9
Total	2,992.0	2,738.6

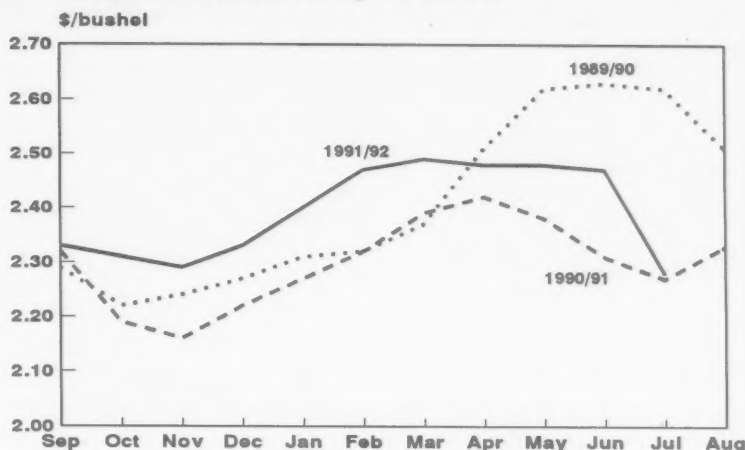
Totals might not add because of rounding.

ings Report and confirmed in the June Acreage Report. Forecast corn planting of 79.3 million acres, was up almost 3.4 million acres from last year, suggesting larger production if yields improved. Thus, when planting got off to an early start and exports lagged, farm prices did not show their usual seasonal strength in May and June.

As ample rains developed during July, farm prices declined nearly \$0.20 per bushel to a mid-month average of \$2.28. With the large August production forecast, farm prices are expected to weaken further during the June-August quarter. As a result, prices received by farmers are forecast to average \$2.37 per bushel for the 1991/92 marketing year.

[Tom Tice, (202) 219-0840]

Figure 5
Corn Prices Received by Farmers



Sorghum Production Boosted by Larger Plantings

The forecast of 1992 planted and harvested sorghum area was increased 1.1 million acres in August due to plantings on abandoned cotton acres in Texas. This, along with good growing conditions in major sorghum producing states, boosted forecast sorghum production to 834 million bushels, 44 percent above 1991.

Extremely wet and cool conditions in the high plains of Texas caused many farmers to abandon previously planted cotton acreage due to poor stands. Following the abandonment, farmers planted grain sorghum on some of the land. This boosted sorghum planting in Texas to 5.0 million acres, compared with 3.9 million last year. The increase in Texas sorghum planting pushed up total U.S. acreage to 13.5 million acres, the largest since 1986/87. With planted area up over 1 million acres from the June estimate, indicated harvest was increased by a corresponding amount to 12.3 million acres.

Good Weather Also Supports Larger Sorghum Crop

The major producing states of Kansas, Nebraska, and Texas had collected normal to above-normal precipitation during July while generally experiencing normal to below-normal temperatures.

This combination of favorable temperatures and rainfall produced excellent crop development conditions. In these states, 82 percent of the sorghum crop was rated good or excellent on August 1 compared with just 50 percent a year ago. The August forecast of average U.S. yields of 67.7 bushels per acre is up from 59.0 bushels for 1991/92 and second largest on record. Record sorghum yields were set in 1987/88 at 69.4 bushels per acre on 10.5 million harvested acres.

Thus, sorghum supplies for 1992/93 are forecast to rebound significantly, in spite of the third lowest carryin stocks since 1975/76. Total sorghum supplies for 1992/93 are forecast at 921 million bushels, the largest in three years, but still well below the 1985/86-1987/88 average of over 1,460 million bushels.

Larger Supplies Promote Larger Use in 1992/93

Limited sorghum supplies have restricted use during the last two years to well below 700 million bushels. Sorghum supplies in excess of 900 million bushels will allow both domestic use and exports to increase in 1992/93. The greatest year-over-year gain is expected in feed and residual use, which is projected at 475 million bushels, up 130 million from 1991/92. Stronger export demand from Mexico could boost exports above 300 million bushels for only the fourth time since 1975/76. Total disappearance of sorghum is, therefore, expected to reach 785 million bushels.

Ending Stocks Also Build on Larger Supplies

Although total use of sorghum will be up significantly in 1992/93, it remains below forecast production. Thus, end-

ing stocks are projected to increase modestly to 136 million bushels. The larger stocks and lower corn prices will cause prices to drop. Average prices received by farmers for sorghum during 1992/93 are forecast at \$1.75 to \$2.15 per bushel, compared with \$2.28 for 1991/92.

March-May Use Up on Strong Exports

Sorghum stocks on March 1 were reported at 251.2 million bushels, down

more than 80 million from a year earlier. However, in spite of the smaller supplies, demand remained strong. Total disappearance of 140.9 million bushels during the quarter was up 30 million bushels compared to the corresponding quarter a year earlier. Domestic use remained virtually unchanged, but exports were up 29 million bushels. As a result, sorghum stocks on June 1, 1992, were estimated at 110 million bushels, less than half the level of a year earlier.

With demand remaining strong and stocks becoming critically tight, sorghum prices have remained strong relative to corn. Like corn prices, sorghum prices peaked in March at \$2.41 per bushel, but declined to \$2.36 in June and to a mid-month price of \$2.32 in July, just \$0.09 below its peak. For 1991/92, sorghum prices received by farmers are expected to average \$2.28 per bushel.

[Tom Tice, (202) 219-0840]

1992/93 Barley Supplies Fall; Feed and Residual Use Expected to Respond

Barley production is forecast at 395 million bushels, down nearly 70 million bushels from a year ago because of lower harvested acres. Forecast average yields of 54.1 bushels per acre are down slightly from last year, but 4 bushels above the average of the previous 5 years.

An expected decline in barley's harvested acres for 1992/93 coupled with a small forecast decline in yields indicates a significant reduction in barley production for the year. Dryness in the Pacific Northwest has hurt the crop all summer long as did freeze damage early in the season. Idaho and Montana, projected to be the nation's second and third largest barley producers for 1992/93, are forecast to show large year-to-year drops in yields. In North Dakota, where one third of the crop is expected to be harvested, yields are projected to remain steady, while a small gain in yields is expected in Minnesota. The national average yield for 1992/93 is forecast at 54.1, about 1 bushel lower than the previous year.

With lower harvested area and slightly lower yields, barley production is forecast at 395 million bushels, down nearly 70 million from a year ago. Nationwide, the anticipated harvested area for barley in 1992/93 is 7.3 million acres, sharply down from 8.4 million acres in 1991/92. Lower relative prices for barley vis-a-vis other crops brought about a decline in the planted acres for barley, even though the set-aside acreage declined from 7.5 to 5.0 percent. In many

areas, farmers opted to plant some barley flex acres to wheat.

The smaller forecast production, slightly lower beginning inventories, and weaker imports indicates 1992/93 barley supplies of only 545 million bushels--almost 80 million bushels less than the 1991/92 level and the lowest since 1976/77.

As barley supplies tighten in 1992/93, uses will adapt. Total use for the year is projected at only 430 million bushels, down 64 million from last year. Almost all of the decline is expected to be in feed and residual use, which is projected at 170 million bushels, down 59 million from last year. Exports are projected at 90 million bushels, down 5 million from 1991/92. Although drought has reduced production, the European Community will be able to pull from abundant stocks and is expected to increase barley exports, gaining market share. Other barley exporters (including Canada, Sweden, and Finland) are expected to be faced with reduced exportable supplies. FSI use is forecast to remain stable at 170 million bushels due to slow economic growth.

With total barley use projected in excess of production, ending stocks are forecast to fall 25 million bushels to 115 million. Barley prices received by farmers are forecast to average \$1.90-\$2.30 per bushel in 1992/93, compared with \$2.10 in 1991/92.

Conditions Tighten as 1991/92 Ends

Barley stocks as of March 1, 1992, totaled 215.9 million bushels, 5 million above the level of one year earlier, but less than half the level of a few years ago. Imports for the final quarter of the June-May crop year were 7.2 million bushels, marginally higher than one year earlier. As a result, supplies during the March-May quarter of 1992 were about 2 percent higher than the previous year. Domestic use during the 3 month period fell around 3 million bushels to just over 73 million. The implied feed and residual use for the quarter amounted to over 23 million bushels, below the average of the 2 previous years and less than half the level of 1987/88 when supplies were far larger. March-May 1992 barley exports rebounded to almost 20 million bushels,

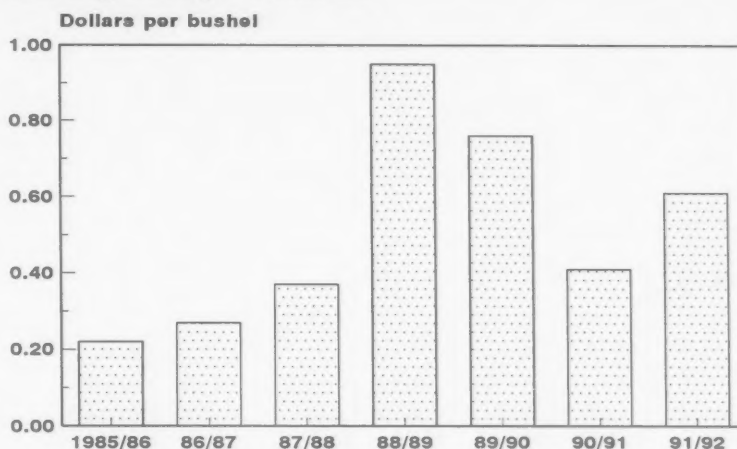
1987/88 when supplies were far larger. March-May 1992 barley exports rebounded to almost 20 million bushels, up from only 6 million in the same quarter last year.

Disappearance for the entire 1991/92 year was bolstered by gains in the feed and residual use (up 12 percent from a year earlier) and exports (at 94.5 million bushels, up 17 percent). Thus total disappearance in 1991/92 is estimated at 494.4 million bushels, up from 461.1 million in 1990/91.

Although ending stocks of barley fell over 5 million bushels, the average price received by farmers declined in 1991/92 to \$2.10 per bushel, compared with \$2.14 a year ago. This year's price is the lowest since 1987/88, and once again declines in malting barley prices helped push down the all barley price. Malting barley prices received by farmers in 1991/92 rose to \$2.40 per bushel, up 7 cents per bushel from the previous year. However, much of the gain was early on in the June-May crop year, and prices fell seasonally during the final quarter. Feed barley prices in 1991/92 were generally the mirror image of malting barley. The average price received by farmers fell 4 cents to \$1.92 per bushel

Figure 6

Malting Barley Premiums



Malting minus feed; average price received by farmers.

during the year, bottoming out during the first quarter at \$1.63 per bushel.

As a result, the price differential between malting barley and feed barley in 1991/92 increased to \$0.61 per bushel,

up from \$0.41 per bushel in 1990/91 but down from \$0.76 per bushel in 1989/90. Over the last 5 years of the 1980's, the price differential has averaged over \$0.51 per bushel.

[Jim Cole, (202) 219-0840]

Oats Harvested Area Holding Steady in 1992/93; Yields Gain

U.S. oats production for 1992/93 is forecast at 276 million bushels, up over 30 million bushels from last year as average yields rose 7 bushels per acre to 57.6. However, 1992/93 oats supplies are forecast to decline due to lower carryin stocks and reduced imports.

Oats production prospects in 1992/93 are improved over the previous year. Total production is forecast at 276 million bushels, up 34 million from 1991/92. Since the anticipated harvested area at 4.8 million acres is virtually the same as in 1991/92, the gain results from higher yields. The similar harvested area is coming from 600,000 fewer acres planted to oats in 1992/93. This significantly boosts the harvested-to-planted ratio from 55 percent last year to 60 percent in 1992/93.

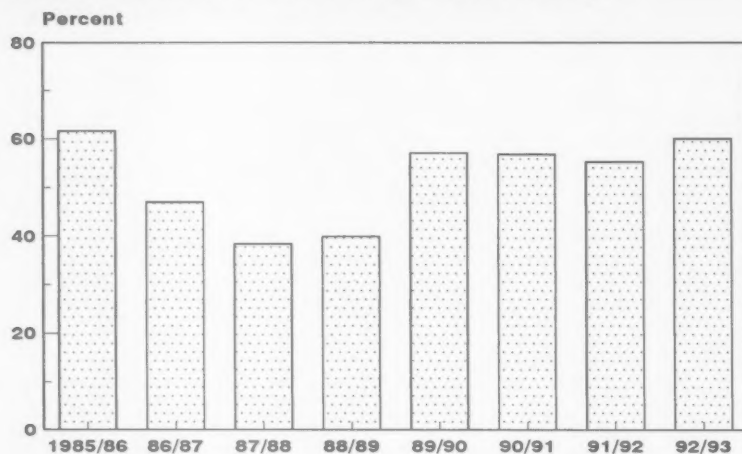
There are some shifts in projected harvested acres among major oats-producing states. South Dakota's 700,000 acres are unchanged from 1991/92, but Minnesota's harvested acres are expected to decline 70,000 acres to 500,000. This decline is offset by gains in Iowa--up 75,000 to one-half million acres.

The average yield for 1992/93 oats is forecast at 57.6 bushels per acre, up 7 bushels or 14 percent from the previous year, but below the 1990/91's 60.1

bushels. Yield prospects for most major oats producing states are improved in 1992/93, including Iowa, Minnesota, Nebraska, South Dakota (marginal improvement), and Wisconsin. However, year-to-year prospects are unchanged in North Dakota.

Oats carryin stocks for 1992/93 were estimated at 127 million bushels, 44 million below the previous year. Also, imports are forecast down 10 million bushels (to 65 million). These declines will more than offset the higher produc-

Figure 7

Ratio of Harvested to Planted Acres: Oats

total 220 million bushels. FSI use is projected up 5 million bushels to 130 million as the food component continues to grow.

Ending stocks in 1992/93 are projected to fall 10 million bushels to only 117 million as use exceeds production. The stocks-to-use ratio is likewise projected down somewhat, at 33 percent versus 35 and 42 percent, respectively, in the previous 2 years. The farm price for oats is expected to average between \$1.10-\$1.50 per bushel in 1992/93, compared with \$1.20 per bushel last year. How-

ever, weaker corn prices in 1992/93 preclude robust growth in oats prices, even in the face of smaller supplies.

Oats Trading Escalates at End of 1991/92 Crop Year; Supplies Tighten

On March 1, 1992, oats stocks amounted to 174.9 million bushels, down sharply from 229.3 million one year earlier. Oats imports for all but the December-February quarter were larger in 1991/92 than in the previous year. Fourth quarter (March-May) imports

were 18.1 million bushels, bringing the total for the 1991/92 year to just under a record 75 million bushels. In 1991/92, sharply reduced production of 243 million bushels brought total supplies to 489 million bushels, down sharply from 578 million in 1990/91. With the exception of the drought-stricken 1988/89 crop, the 1991/92 oats supply was the smallest on record.

Total oats uses during the 1991/92 crop year amounted to only 362 million bushels, down 11 percent from a year earlier. FSI (food, seed, and industrial) use actually rose 5 million bushels to 125 million bushels as increased food use more than made up for a modest reduction in seed use. As a result of tight supplies and modestly increased prices, feed and residual use declined by 51 million bushels to 235 million, the lowest since 1988/89. Exports rose to 1.9 million bushels on the strength of large fourth quarter gains.

Although total disappearance of oats fell in 1991/92, carryout stocks fell to 127 million bushels due to sharply lower supplies. As a result, the season average farm price for 1991/92 is estimated at \$1.20 per bushel, up from \$1.14 per bushel in 1990/91. Since 1970, the price of oats has been below \$1.20 per bushel only 5 times.

[Jim Cole, (202) 219-0840]

Hay

Hay Production To Fall; Supplies Remain Adequate

Pasture and range conditions generally improved during the summer months. Similarly, hay prospects also improved, but yields are forecast marginally down. Since hay is expected to be harvested on 2 million fewer acres in 1992, production is forecast to decline, partially offsetting larger carryin stocks.

Hay production of all types for 1992/93 is forecast at 147 million short tons, down nearly 7 million from last year and marking the first decline in total production since the 1988 harvest. The current year's decline is due primarily to a 2 million acre reduction in harvested acreage, as average yields are forecast at 2.43 tons per acre, down less than 1 percent on the year.

In 1992/93, farmers are projected to harvest hay on 60.5 million acres, the lowest since 1987/88. The figure is down from almost 62.6 million in 1991/92. On a state-by-state basis, the decline is widespread. Twenty-four states are projected to harvest hay on fewer acres this year. The decline is most notable in the Northern Plains States, with South Dakota's harvested acres projected to decline by 550,000 acres, North Dakota 300,000 acres, and Minnesota 250,000 acres.

The decline in acreage is due at least partially to the abundant carryin hay stocks on farms and lower prices. Hay stocks on May 1, 1992, were estimated at 28.6 million short tons, up 1.6 million tons from the level of each of the 2 previous years. Although Texas inventories were up over 900,000 tons, other states with significant declines in the projected hay acreage for 1992 had large

increases in May 1 hay inventories. South Dakota's 3.2 million tons represented an increase of 70 percent, and Minnesota and North Dakota's hay stocks each rose 300,000 tons.

Pasture and range conditions as of August 1, 1992, were well into the good to excellent category, and 12 points above the 1981-90 average. Twelve states, showed a decline, switching from one rating category to another as a result of conditions termed excessively or abnormally dry. These include Washington, Idaho, and Oregon, which are rated in the very poor category. California conditions continue very poor. Conditions in the eastern portion of the country have improved significantly on a year-to-year basis.

However, hay quality has become a concern. Growing conditions have declined in some dry areas, while others have had too much rain. Dairy states

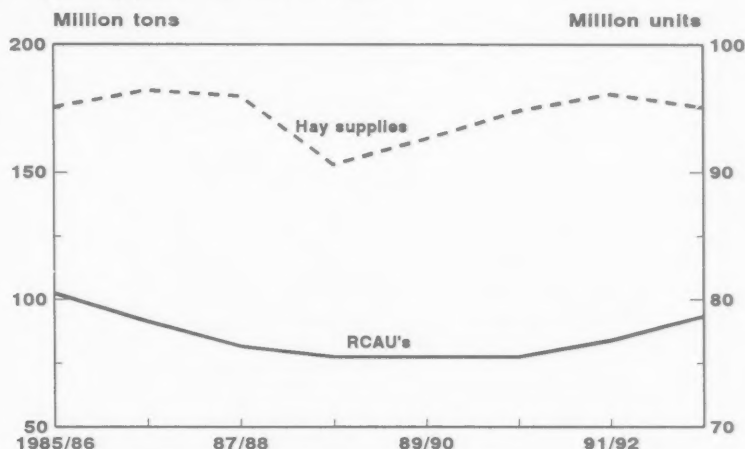
rely heavily on high quality alfalfa, which may be in short supply relative to other hays. However, the abundance of other supplies is expected to hold overall hay prices down.

Alfalfa production in 1992 is forecast to decline, over 5 million tons to 78.4 million as the harvested acreage is expected lower at 24.1 million acres, down from 25.6 million in 1991. Wisconsin's alfalfa acres for harvest are down 500,000 this year to an estimated 2.5 million, while yield is forecast down 18 percent from last year. Alfalfa area harvested is forecast down 350,000 and 200,000 acres in South Dakota and Minnesota respectively, while forecast yields are over 13 percent lower in both states. Forecast alfalfa production in these three states is down 5.5 million tons from a year ago.

Production of all other types of hay in 1992 is forecast at 68.4 million tons,

Figure 8

Hay Supplies and RCAU's



RCAU's are roughage consuming animal units.

down from 69.7 million in 1991. Although the U.S. total harvested acres for non-alfalfa hay is projected to decline about 600,000 acres, the change is spread relatively evenly across many states. The largest decline will be in South Dakota, down 200,000 acres, a 10 percent drop in 1992.

The number of roughage-consuming animal units (RCAU) in 1992/93 is expected to grow around 2 percent to 78.7 million. This is a gain of about 1.5 million units--mostly beef cattle. The total number had been stagnant during the late 1980's, and remains below both 1984/85 and 1985/86. With RCAU units forecast higher and hay supplies lower, the supply per RCAU as a result is forecast to decline in 1992/93 to about 2.23 tons per RCAU, down from the previous year's 2.35 tons.

Disappearance likely will fall below 150 million tons in 1992/93. Although long-term forecasts of weather are not generally reliable, under normal weather assumptions pasture and range conditions through the winter may remain above a year ago and temper hay usage. Further, total feed grain supplies are up 9 percent from last year, providing ample stocks to make up for lower quality alfalfa.

As in past years, production and disappearance will continue to depend partly on range and pasture conditions through the rest of the growing season, weather conditions this winter, and the availability and price of other feeds.

Hay Prices Remain Low

Hay prices generally declined during the first and second quarters of the

(May-April) 1991/92 crop year and remained relatively steady during the final 2 quarters. Seasonally, prices fell from a May peak of under \$84 per ton to about \$68 per ton in December, then rebounded slightly in the following 3 months. For the year, all hay prices averaged \$71.00 per ton, down from \$80.60 per ton in 1990/91 and the record \$85.40 per ton in 1989/90.

Alfalfa prices in 1991/92 also increased in the fourth quarter. The average price for alfalfa during the year was \$75.30 per ton, well below the 1990/91 price of \$86.60 per ton and \$93.80 price one year earlier. Other hay prices in 1991/92 averaged \$61.80 per ton, somewhat lower than the \$65.10 per ton in 1990/91.

[Jim Cole, (202) 219-0840]

Feed and Residual Use of Feed Grains Forecast Up 4 Percent From 1991/92

Feed and residual use of feed grains is forecast at 146 million metric tons for 1992/93. However, feed and residual use of wheat in 1991/92 (September-August) is expected to plummet 77 percent from the 12.7 million metric tons used in 1990/91.

Feed and residual use of feed grains (corn, sorghum, barley, and oats) in 1992/93 (September-August year) is projected to be up 4 percent to 146.2 million metric tons. An increase in the number of livestock, especially hogs and broilers, plus lower grain prices will likely push up feed use. In addition, wheat quality in some areas has suffered because of rain and other weather problems. While this will result in some low quality wheat available for feeding again this year, in general, wheat feeding is expected to be well below the levels of the previous 2 years. Feed and residual use of feed grains and wheat in 1992/93 could total 150.9 million metric tons, up 5 percent from 1991/92.

The index of grain-consuming animal units (GCAU's) in 1992/93 is expected to be up 1.9 percent from 1991/92, which was 1.3 percent above 1990/91.

The expected increase in the 1992/93 GCAU index is caused by a 4 percent rise in broiler units, and a 2 percent rise in both hogs and turkeys. The decline in dairy numbers expected next year lowered the dairy portion of the index.

Dairy cow numbers continue to decline but feed use may not be reduced. The number of dairy cows on farms during April-June 1992 was 1 percent less than a year ago, but milk per cow was up sharply from a year earlier. Thus milk production for the quarter was 1 percent higher. The grain and other concentrates fed per cow on July 1 were up nearly 2 percent from last year. The value per 100 pounds of grain and other concentrates was \$7.82, compared with \$7.71 in July 1991.

Milk production in 1991/92 is expected to be up nearly 1 percent, even with

reduced cow numbers. Cow numbers in 1992/93 will likely continue to trail year earlier levels but milk per cow will likely continue to rise. Lower feed prices are expected to keep concentrate feeding at a high level, especially if there are quality problems in the roughage supplies. Milk production in 1992/93 is forecast around 1 percent above 1991/92.

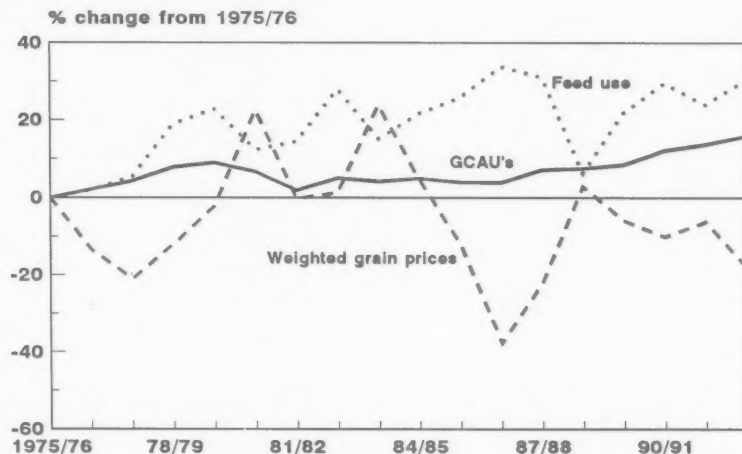
Cattle on feed for the remainder of 1992 are expected to rise with increased placements as yearlings are moved off grass. While above recent levels, cattle on feed inventories will remain historically low through 1993. Yearling cattle outside feedlots on July 1 were up 1 percent from last year but the number of calves was unchanged. Low feeding margins and excellent forage conditions have kept placements down since mid-1991. Feeding margins will improve with lower grain prices, increasing feed use during the remainder of 1991/92 and in 1992/93.

Feed demand by the poultry sector is expected to continue strong in 1992/93. In 1991/92, broiler production will likely be up 5 percent from last year as increased numbers and heavier weights boost production. The relatively cool weather has contributed to increased slaughter weights through June. In 1992/93, broiler production will likely increase 4 percent from this year.

Turkey production in 1991/92 is expected to increase 2 percent from the year earlier. Returns have been squeezed, slowing the rate of increase in turkey production. Cold storage stocks of turkey continue record high, as turkey consumption per capita was below a year earlier during the first half 1992. With continued large supplies of meat available in 1992/93, turkey production will likely increase only 2 to 3 percent from 1991/92 levels.

Figure 9

Feed Use and GCAU's



Feed includes feed grains and wheat and includes residual component. GCAU's are grain consuming animal units.

In 1991/92, egg producers are expected to increase production 2 percent, in response to favorable returns in 1991. However, returns have been generally negative this year. In 1992/93, hatching egg production will continue to increase to supply the broiler industry but table egg output may decline. Total egg production will likely remain about steady.

As of June 1, 1992, U.S. hog producers reported intentions to farrow 1 percent more sows than last year during June-August and 3 percent more during Sep-

tember-November. Returns to hog producers were unfavorable during the June-August breeding period, possibly slowing the increase in farrowing intentions. Returns have improved as hog prices strengthened from winter levels and grain prices declined with expectations of a large crop. Pigs born during June-November will supply most of the hogs for slaughter during first-half 1993. These increases in hog numbers, if realized, on top of the increased hog numbers of this year will result in strong feed demand in 1992/93.

Large feed supplies and low prices for both feed and hogs in first-half 1992/93 are expected to result in a loss of marginal hog producers but no major breeding herd liquidation. As a result, the December 1992-May 1993 pig crop is expected to decline 1-2 percent from a year earlier. Feed demand by the hog sector would begin to level off in June-August 1993.

[Allen Baker, (202) 219-0840]

FSI Use of Corn Expected to Account for 18 Percent of Total Corn Use in 1992/93.

Led by increases in corn used for production of sweeteners and fuel alcohol in 1991/92, FSI uses of corn are estimated up 6 percent from last year.

FSI use of corn in 1991/92 (September/August) is expected to total 1,445 million bushels, up 6 percent from last year. The biggest increases are expected to be in corn used for fuel alcohol and corn sweeteners. FSI use at these levels in 1991/92 would represent 18.2 percent of total corn disappearance, up from 17.6 percent in 1990/91.

During 1992/93, FSI use of corn is projected to increase only 1 percent, because of continued slow economic growth and the suspension of plans to increase alcohol capacity. Still, FSI will represent about 18.2 percent of total forecast corn disappearance.

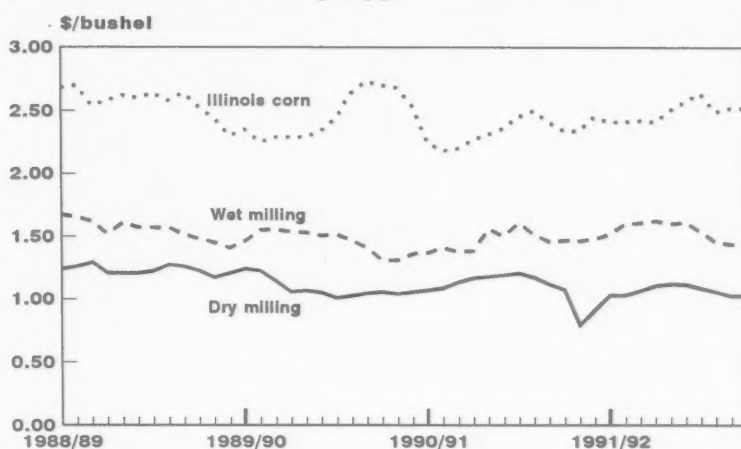
High fructose corn syrup (HFCS) production in 1991/92 will likely use 400 million bushels of corn, up nearly 6 percent from last year. Even though the upper midwest has had a cool summer through early August, HFCS shipments have run 5 percent above last year. Increased use of HFCS is generally associated with increased soft drink sales, which decline with lower temperatures. In 1992/93, HFCS use is expected to increase 1 percent from last year, more in line with population growth. Plus, both the sugar beet and sugar cane crops are expected to be up.

Use of corn for glucose and dextrose production in 1991/92 is forecast to increase over 6 percent from 1990/91's 200 million bushels. The increase in use this year may have been in response to concerns about the supply of sugar and to continued increased use by the

baking, brewing, and candy industries. Corn used in glucose and dextrose during 1992/93 is expected to increase 1 percent in keeping with population growth rates.

Figure 10

Corn and Corn Milling Byproducts Values



Byproduct values converted to corn equivalent based on byproduct yield.

Table 2--Corn: Food, seed, and industrial use, 1980/81-1992/93 1/

Year	HFCS	Glucose and dextrose	Starch	Fuel	Alcohol Beverage	Cereals & other products	Seed	Total
Million bushels								
1980/81	165	156	151	35	78	54	20	659
1981/82	183	160	146	86	86	53	19	733
1982/83	214	165	150	140	110	60	15	854
1983/84	265	167	170	160	88	70	19	930
1984/85	310	167	172	232	84	81	21	1,067
1985/86	327	169	190	271	83	93	19	1,152
1986/87	338	171	214	290	85	109	16	1,223
1987/88	358	173	226	279	77	113	17	1,243
1988/89	361	182	223	287	107	114	19	1,293
1989/90	368	193	230	321	109	115	19	1,355
1990/91	379	200	232	344	80	114	19	1,368
1991/92	400	213	237	378	81	116	20	1,445
1992/93	404	216	240	385	83	117	20	1,465

1/ Marketing year beginning September 1.

In 1991/92, corn use in starch production is forecast to increase 2 percent from 1990/91's 200 million bushels. The slow growth in the economy has slowed the rate of growth in starch with use in building materials off but increased use in paper production. Starch production in 1992/93 is expected to increase 1 percent from last year.

Sales of gasoline blended with alcohol during September-March (the latest available) were up 13 percent from last year. Most of the increase was due to the winter time oxygenate programs in some cities and tax incentives by vari-

ous states. Ethyl alcohol blending has declined as the weather warmed and the winter programs came to an end. In addition, corn prices were up in the spring as concerns about the 1992 crop boosted prices. In the spring quarter, higher corn prices and lower prices for byproducts reduced margins and may have caused some plants to slow production. With prospects for a large crop, corn prices have declined, which may improve margins.

Corn costs are calculated using prices reported for Number 2 corn in Central Illinois by USDA Grain Market News

and do not reflect costs associated with moving the corn to the ethanol producer. Values per bushel of corn for milling byproducts are calculated by using reported prices for corn gluten feed and meal, corn oil, and distillers' dried grains. Corn used for ethanol production in 1991/92 is expected to total 378 million bushels, up 10 percent from last year. Corn use in 1992/93 is forecast up 2 percent from 1991/92.

[Allen Baker, (202) 219-0840]

Supply of Transportation Equipment Will Remain Adequate for Harvest and Beyond.

Exports and domestic use of total grains and soybeans for 1992/93 are now projected at 358 million metric tons, nearly unchanged from 1991/92. Total wheat use, however, is projected down 9 percent, nearly 6 million metric tons, suggesting a slackening in demand for rail transportation. Projected increases in exports of corn, soybeans, and soft red winter wheat are expected to add to demand for barge service on the Mississippi River system.

Outlook for 1991/92 Remains Unchanged

For the current crop year, total use of grain and soybeans is projected up 2 percent from 1990/91. Increased wheat exports have held rail loadings 6 percent above 1990/91's average of 25,701 cars per week. Barge shipments of corn and wheat have run below 1990/91 levels, but increased soybean volume, through July, helped hold total barge shipments only 3 percent below the 1990/91 average.

Rail Volume Averages Above Last Year

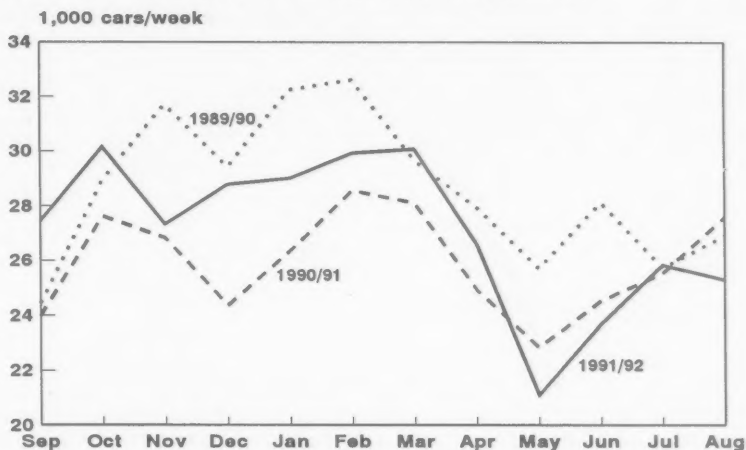
Rail shipments of grain and soybeans during September-July 1991/92 averaged 27,259 cars per week, 6 percent above 1990/91's annual average. Much of this resulted from a 32 percent increase in grain shipments to export points. During September-July 1991/92, average rail car unloadings at coastal ports increased by 1,861 cars per week from the same months of 1990/91. The increase was largest at Pacific Coast and Texas ports where unloads rose 596 and 945 cars per week, respectively.

Covered Hopper Cars Will be Available at Harvest

Rail car loadings of grain during October and November usually average 7-8 percent above September. This seasonal rise often leads to short term shortages of covered hopper cars, especially early in the harvest season. Since harvest onset is difficult to predict, railroads find it difficult to position cars exactly where and when needed. In the few days required to move cars from storage locations to areas where harvest is peaking, some reports of car shortages

Figure 11

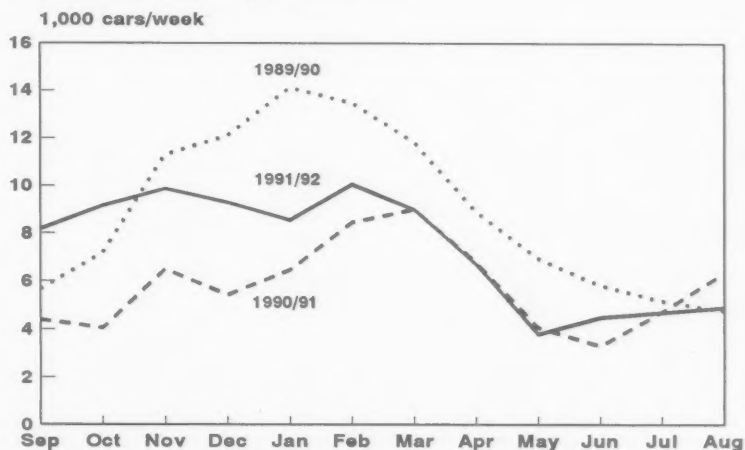
Railcar Loadings of Grain and Soybeans



Data are averaged from weekly data to show monthly data.

Figure 12

Railcar Unloadings of Grain



At Atlantic, Gulf, and Pacific ports.

are again expected, especially given the large corn and soybean crops.

The number of serviceable jumbo covered hopper cars (4,000 cubic feet capacity or larger) available for use peaked in January 1991 at 252,447 cars, totaling about 858 million bushels capacity. In August 1992, the number of cars available had declined 2 percent from the peak, but was 83 cars larger than in October 1991.

Railroads have demonstrated the ability to load 30,000-33,000 cars per week, 16-28 percent above the July 1992 average. The large grain harvest now anticipated is likely to cause rail car loadings in October-November to be above the 28,700 cars per week average for these two months last year.

Harvest Time Rail Rates Projected Slightly Down From Last Year

The Bureau of Labor Statistics' rail rate index for grain was down 1 percent in July from the February high of 111.6. During September 1991-July 1992, the index averaged 110.9, slightly below 1990/91 levels. The Association of American Railroads' rail cost adjustment factor, as adjusted for productivity, projects third quarter rail operating costs down 1.4 percent from April-June. Declining labor costs are expected to offset increases in fuel and other inputs. Lack of increased cost pressures and likely slackening in demand suggest that rail rates for grain in 1992/93 will remain near 1991/92 levels. Widespread use of contract rates partly insulates rates from short term changes in demand. In past years, rail rates have not reacted to short term fluctuations in demand. So, unusual harvest pressures are unlikely to significantly raise rates this year.

Diesel Fuel Prices Level Off

After rising steadily since March 1992, to average \$1.177 per gallon in July, diesel fuel prices, as reported by the

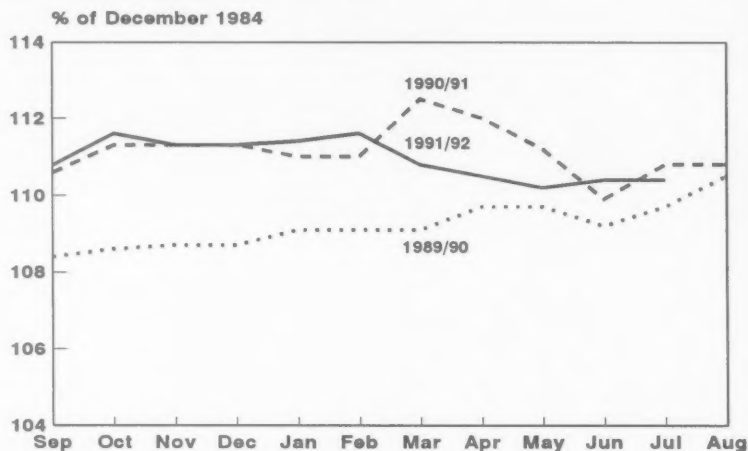
Interstate Commerce Commission, dropped slightly in August, averaging \$1.164 per gallon. The increase in diesel fuel costs through July was the chief cause of truck operating costs rising during same period. In July, truck operating costs rose to \$1.247 per mile, up 10 percent from January, but the same as July 1991. At this time, it appears that costs of transporting grain from farm to first market at harvest will be up slightly from last year.

Navigation Conditions Expected to Remain Adequate through October

The July-August rains that brought about favorable growing conditions held Mississippi River levels well above the 1944-88 average for those months. At St. Louis, flood gauge readings averaged 13.3 feet for August, 129 percent above 1991 and 75 percent above the long term average. Historically, water levels fall sharply in August and remain

Figure 13

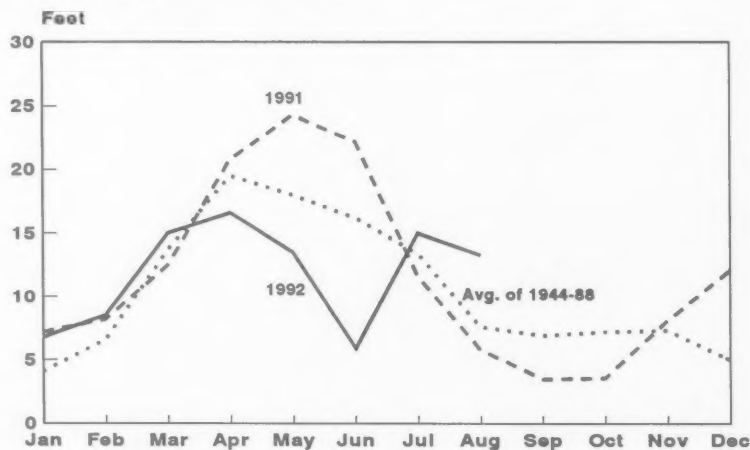
Rail Rate Index for Grain



Source: Bureau of Labor Statistics.

Figure 14

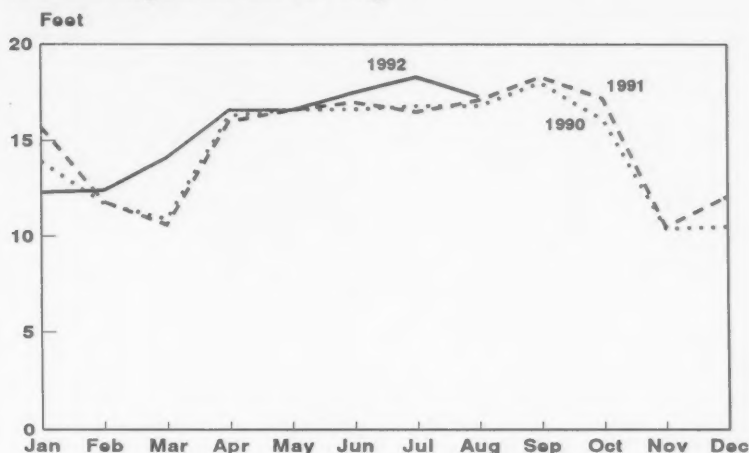
River Stages at St. Louis



Measured at flood gauge.

Figure 15

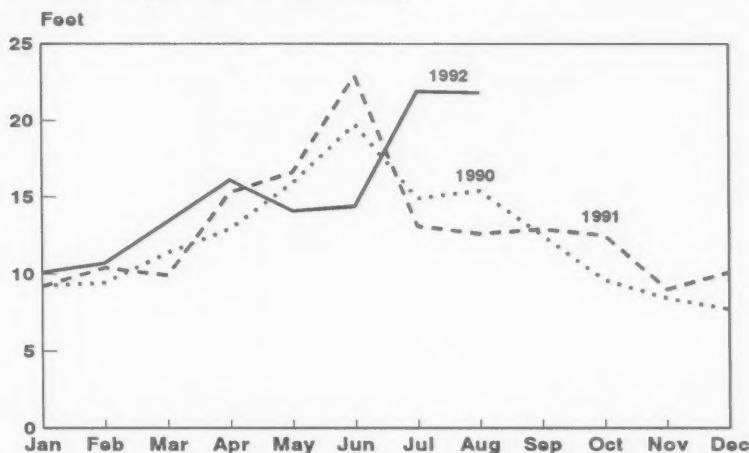
River Stages at Sioux City



Measured at flood gauge.

Figure 16

River Stages at Kansas City



Measured at flood gauge.

below 8 feet from August to February. The 30 day U.S. Army Corps of Engineers' forecast of river conditions at St. Louis, indicates that water levels could fall to 1.0 feet at the gauge by mid-September. This forecast assumes that no precipitation will occur during the period of the forecast. At this time, there is no reason to believe that severe interruptions to navigation will occur on the Mississippi, Ohio, or Illinois Rivers.

Another Short Navigation Season on the Missouri River

The U.S. Army Corps of Engineers' mid-season evaluation of water availability in the reservoirs supplying the Missouri River has caused them to announce that water releases will be curtailed on October 25, 1992. This is 5 weeks earlier than the end-of-November closing contemplated by the Corps' *Missouri River Main Stem Reservoirs System Reservoirs Regulation Manual* for a normal season. This third con-

secutive early closing results from 6 years of drought above Sioux City, Iowa. At the end of June, the six main reservoirs supplying the river held only 45 million acre feet of water, 2.5 million acre feet below last year and 27 percent below average. In November 1991, levels after closing averaged down 6.7 feet at Sioux City and 3.5 feet at Kansas City from October.

The short season and draft restrictions already in effect will not significantly hamper overall U.S. grain flows, but could again impair the competitive position of producers and grain merchants in the Missouri Valley.

Barge Volume Up in July; Expected To Rise in 1992/93

Although barge shipments of grain during May-July 1992 were above year earlier and the 1981/82-1990/91 average, shipments from September through July 1992 remained below 1990/91 and the 10 year average. The primary cause has been a substantial reduction in corn exports through U.S. Gulf ports. For September 1991-July 1992, corn exports through the U.S. Gulf ports, as measured by inspections, were 9 percent below the same months of 1990/91. Total corn exports for 1991/92 are now forecast 10 percent below 1990/91, thus, there is little prospect of barge shipments returning to 1990/91 levels this year.

Barge shipments usually account for 50-60 percent of corn exports and 60-70 percent of soybean exports. Corn and soybean exports combined in 1992/93 are projected up nearly 2 percent from 1991/92. Although total wheat exports are forecast down 12 percent, exports of soft red wheat are projected up from 1991/92. Thus, barge volume is expected to rise somewhat from 1991/92 levels.

Volatile Barge Rates in 1991/92

Barge rates from Peoria, Illinois, to New Orleans, Louisiana, fluctuated from \$10.87 per ton, in September 1991, to \$5.05 in May 1992. At St. Louis, Missouri, the peak occurred in June 1991, \$8.43 per ton, with the low in May 1992, \$3.52 per ton.

As grain volume increased, barge rates rose significantly June-August from the

May low. At Peoria, rates averaged \$5.95 per ton in August, up 18 percent from May. At St. Louis, August rates averaged \$4.09 per ton, 16 percent above May.

Historically, barge rates peak in October as harvest activity moves into full swing. Since the volume of grain shipped by barge is projected only slightly above 1991/92, barge rates during 1992/93 are expected to average near those levels. Still, sudden swings in response to changing corn and soybean export activity will continue.

[T.Q. Hutchinson, (202) 219-0840]

Record corn production is not expected to strain grain storage facilities. Although total grain storage capacity declined 8 percent 1987-1991 to 21.1 billion bushels, the very small beginning stocks of corn and wheat result in ample storage space for the 1992/93 grain crop.

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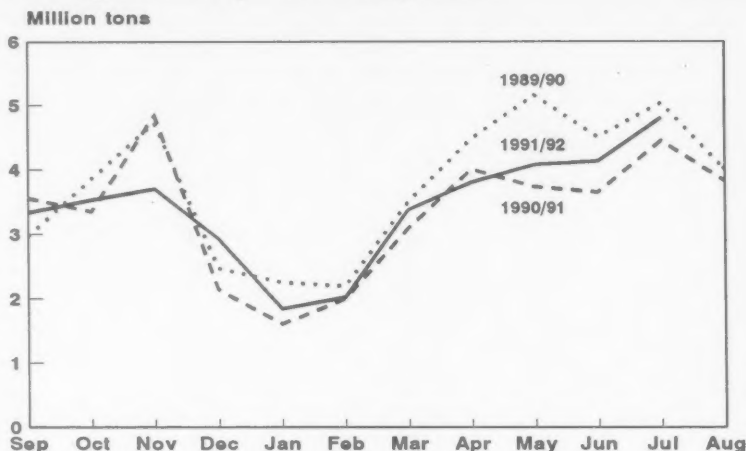
Storage capacity versus supplies

	1986	1990	1991
Storage capacity (December 1)			
Off-farm	9,127	9,089	8,913
On-farm	13,830	12,400	12,170
Total	22,957	21,489	21,083
	1986/87	90/91	92/93
Grain supplies 1/			
Feed grains	15,260	11,169	11,708
Wheat	3,996	3,272	2,808
Soybeans	2,479	2,165	2,364
Total	21,734	16,606	16,880
Est. surplus	1,223	4,883	4,203

1/ Beginning stocks plus production.

Figure 17

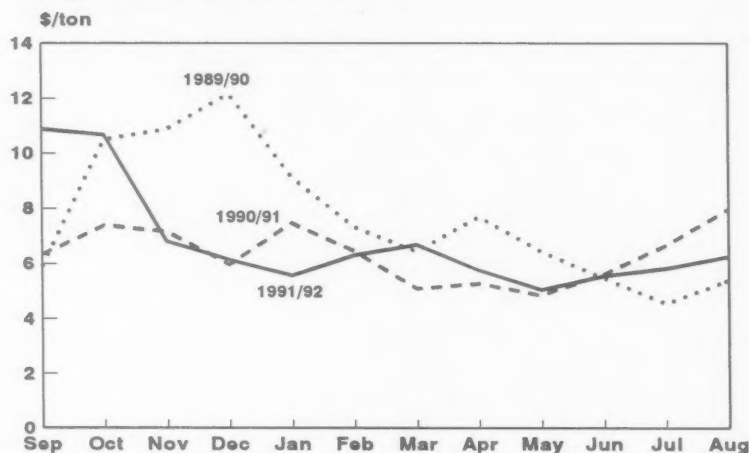
Average Monthly Grain Shipments



Mississippi River and Illinois waterway.

Figure 18

Barge Rates to New Orleans



From Peoria, IL

Global Coarse Grain Production and Supplies Up in 1992/93

Record corn crop expected, but world barley and oats harvests to decline. Foreign production and consumption of coarse grains down again.

Global production of coarse grains in 1992/93 is forecast to rise 2 percent to 818 million tons. The large gains forecast for U.S. production are expected to more than offset a decline in foreign crops. Most of the increased production will be corn, up a forecast 32 million tons, with smaller gains in sorghum. While a record world harvest of corn is forecast, barley output is expected to fall 18 million tons to its lowest level since 1975/76. World oats production, which reached the lowest level of the century in 1991/92, is forecast to decline nearly 2 million tons further in 1992/93. A marginal decline in the world rye harvest is forecast.

After declining an estimated 1 percent in 1991/92, global supplies of coarse grains are expected to increase by a similar amount in 1992/93. World export prices for corn are likely to fall, given expectations of sharply lower U.S. prices. The price outlook for barley is less certain due to tightening world supplies. World supplies of wheat in 1992/93 are forecast to shrink by more than 2 percent. However, international wheat prices are expected to be pressured by large supplies held by some of the major wheat exporters and reduced global imports, especially by the former Soviet Union and China. Nevertheless, relative price indications point to limited trade in wheat for feeding in coming months, unless there are major quality problems in the EC and Canada.

Global coarse grain use is forecast at 804 million tons, down very slightly for the third consecutive year, largely due to lagging consumption in the former Soviet Union and Eastern Europe. Aggregate consumption in the rest of the world is forecast to rise 1 percent in 1992/93.

Although foreign ending stocks are likely to decline in 1992/93, a large forecast increase in the U.S. carryover will raise world coarse grain stocks. World

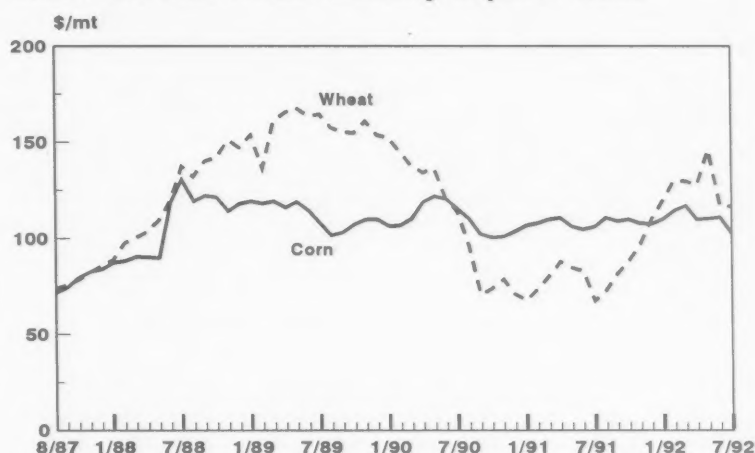
ending stocks are forecast to climb 11 percent to 143 million tons, the highest in 4 years. The ratio of ending stocks to use, projected at 17.8 percent, is also expected to be the highest in 4 years and well above the estimated 16 percent in 1991/92.

Foreign Production Lowest Since 1985/86

Foreign production of coarse grains in 1992/93 is forecast to fall more than 3 percent--nearly 20 million tons--from a year earlier to 562 million tons. This

Figure 19

U.S. Corn and Wheat Monthly Export Prices



Corn FOB Gulf. Wheat HRW FOB Gulf minus average EEP bonus.

Table 3--Foreign coarse grain production, major countries and regions, 1990/91-1992/93

	1990/91	1991/92 1/	1992/93 2/
Million tons			
China	111.7	112.3	109.9
EC-12	84.0	89.4	80.9
Former Soviet Union	103.3	77.4	83.0
Eastern Europe	51.4	64.5	50.2
India	32.9	29.1	33.0
Brazil	24.4	29.3	25.8
Canada	25.4	21.8	21.4
Mexico	18.4	17.6	16.8
Argentina	10.8	14.2	13.0
Turkey	9.3	9.6	9.1
Other Western Europe	13.7	12.3	9.0
South Africa	8.9	3.3	8.5
Nigeria	6.3	8.1	8.2
Australia	6.7	7.9	7.5
Thailand	4.1	3.8	3.8
Others	79.4	80.6	81.5
Total	590.7	581.2	561.6

1/ Preliminary. 2/ Forecast.

would be the lowest outturn since 1985/86. With the exception of the former Soviet Union (FSU) and South Africa, declines are expected for virtually all of the major foreign producers. There is no consistent explanation for this anticipated decline. While adverse weather is cutting output in a number of countries, normal weather following very favorable conditions in the previous year and/or reduced plantings due to economic reasons are also important factors.

In Europe, drought has severely cut crop prospects, especially for spring planted crops in northern Germany, Poland, and much of Scandinavia. Coarse grain production in the European Community (EC) is forecast to drop by 8.6 million tons in 1992/93, with barley accounting for most of this. EC corn output, however, is forecast up slightly.

In Eastern Europe, output of coarse grains is forecast to drop 14.3 million tons. The largest drop is expected in corn due to poor yield prospects, followed by barley and rye, for which both area and yields are likely to be down.

Production in Other Western Europe is forecast down 3.3 million tons, a 27 percent decline from 1991/92. This outlook has important implications for world oats trade, since exports by Finland and Sweden will be severely curtailed.

The former Soviet Union has also been affected by the drought as it has ex-

tended into the European areas of the FSU. However, the overall outlook is more favorable and coarse grain production is forecast to rise 5.6 million tons. In addition, the FSU wheat crop is forecast up 8.2 million tons. Total grain area is about the same as 1991/92 (more winter grains but less spring), but average yields are expected to rise. Despite this improvement, the 1992/93 grain crop could best be described in historical terms as mediocre, ranking third lowest in the last decade.

Relatively small changes are expected among most other large Northern Hemisphere producers in 1992/93. Small production declines are forecast for Canada, Mexico, China, and Turkey. In most Southern Hemisphere countries, planting of the main 1992/93 crops will begin later in the year. A sharp rebound is expected in southern Africa, assuming a return to normal weather after the 1991/92 drought. In Brazil, production is likely to fall because of policies favoring soybean cultivation at the expense of corn. Argentine output is also expected to fall, assuming yields return to average levels from the record achieved in 1991/92.

Foreign Consumption Prospects Weak

Foreign consumption of coarse grains is forecast to decrease 1 percent in 1992/93 to 615 million tons, down for the third year in a row. Dominating the outlook are events in the FSU and Eastern Europe. In both regions, reforms

and weak economic growth have led to cutbacks in production and consumption of meat and livestock products, cutting grain feeding. No quick rebound is expected. The prospective decline in Eastern Europe's domestic crops in 1992/93 will further reduce consumption, since financial constraints will limit the region's ability to use imports to offset production shortfalls.

Among the foreign developed, industrial countries, including the EC and Japan, coarse grain use is expected to decline slightly in 1992/93, continuing the downward or stagnant pattern of recent years. However, further gains are expected among developing countries, despite the likelihood of lower use in Africa. Developing country consumption is up an estimated 3 percent in 1991/92, and is forecast to rise about 1.5 percent in 1992/93, led by increases in Asia. India is forecast to register the largest gains due to a recovery in crops, which are mostly consumed as food. South Korea is likely to have large gains in use, reflecting less feeding of wheat and continued strong growth in meat production. Increases for most other developing countries in Latin America and Asia are expected to be smaller in 1992/93 than a year earlier, with some registering declines. In the Middle East, coarse grain use is expected to remain flat, continuing the pattern of recent years.

[Peter Riley, (202) 219-0824]

World Coarse Grain Trade in 1992/93 Forecast Down 7 Percent

*Declining competitor sales will boost U.S. market share.
FSU imports projected down.*

World coarse grain trade is forecast to decline 7 percent in 1992/93, as trade in corn, barley, and oats is expected down.¹ U.S. coarse grain exports are forecast to increase marginally, but reductions in competitor exports are forecast to help raise U.S. market share to 57 percent from 53 percent in 1991/92.

Competitor exports have been strong in 1991/92, forecast to reach a 6 year high. However, in 1992/93, only the EC is forecast to increase exports significantly, up 18 percent because of higher barley exports. A small gain in Australia's exports is expected while exports by Thailand remain unchanged. In fact, Thailand has resorted to some corn imports from China this year to meet seasonal feed shortages and will likely have to import again in 1992/93.

Tighter foreign exporter supplies and lower U.S. prices mainly account for the forecast reductions in shipments by other competitors in 1992/93, including Argentina, Canada, China, Eastern Europe, and South Africa. In addition, smaller exporters, such as Finland, Sweden, and Turkey, are also likely to reduce coarse grain exports because of smaller crops.

In 1991/92, U.S. corn exports have declined significantly to the former Soviet Union, the EC, Eastern Europe, Mexico, and South Korea. These markets account for the most of the forecast 8 percent reduction in total U.S. corn shipments. On the other hand, U.S. sorghum exports in 1991/92 are forecast up 17 percent because of very strong demand from Mexico.

¹ All trade years referred to in this section are October-September and exclude intra-EC trade unless otherwise specified.

Imports by FSU To Fall, Southern Africa To Remain A Large Importer

Significant gains in imports are forecast for Mexico, South Korea, and Eastern Europe in 1992/93. For Mexico, continued strong growth in feed demand accounts for the expected rise in imports. The same factor, coupled with fewer imports of wheat for feeding, will push up South Korea's corn imports. Eastern Europe is expected to import more coarse grains due to short crops. However, even with heavy reliance on credit and donations, countries in the region will not be able to import enough to offset production shortfalls because of weak financial positions.

Declining imports by the FSU and some other countries, such as Egypt and Saudi Arabia, are expected to more than outweigh these gains, however. The most critical development shaping world trade expectations is lower imports by the FSU, projected at 12 million tons in 1992/93, a decline of more than 5 mil-

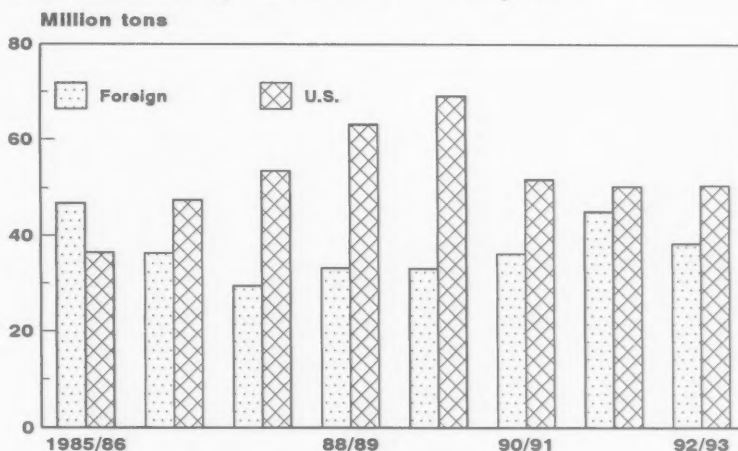
lion tons from the 1991/92 forecast. Although domestic grain production is expected up, these projected imports will not be sufficient to halt the continuing contraction of the livestock sector. The lack of foreign exchange, the limited availability of exporter credit, and difficulties for some of the FSU republics in establishing credit worthiness are restricting imports. As in 1991/92, the FSU is expected to import more wheat (for bread) than coarse grains.

After a dramatic increase in 1991/92, corn imports by the southern Africa region are expected to decline slightly, but to continue well above normal in the October-September 1992/93 trade year. Severe drought reduced 1991/92 corn production by about 60 percent in South Africa and other countries of the region.² Crop production in southern Af-

² Zimbabwe, Zambia, Mozambique, Malawi, Botswana, Angola, Lesotho, and Swaziland.

Figure 20

U.S. and Foreign Coarse Grain Exports



Excludes intra-EC trade. Forecast for 1991/92 and 1992/93.

Table 4--World coarse grain trade: Major exporters and importers by commodity, 1988/89-1992/93 1/

Item	1988/89	1989/90	1990/91	1991/92 2/	1992/93 3/
Million metric tons					
CORN					
Exporters:					
U.S.	51.3	60.0	44.5	41.0	41.0
Argentina	2.5	3.0	3.7	6.3	6.0
China	3.7	3.2	6.6	10.0	8.0
Thailand	1.4	1.4	1.3	0.8	0.7
South Africa	2.0	2.9	0.8	0.8	0.1
Others	4.4	4.2	3.4	4.8	2.0
Total	65.3	74.6	60.1	63.7	57.8
Importers:					
Japan	15.9	16.0	16.0	16.2	16.2
Former USSR	19.5	19.4	11.5	10.4	6.4
EC-12	2.9	4.1	3.7	2.0	2.0
Korea, Rep.	5.7	6.1	5.6	6.8	8.0
Taiwan	4.2	5.3	5.3	5.7	5.4
Mexico	3.2	5.0	1.8	1.1	2.1
China	0.0	0.5	0.0	0.0	0.0
East Europe	1.7	2.1	1.8	0.2	0.5
Brazil	0.2	0.4	0.9	0.4	0.0
Egypt	1.2	1.4	2.1	1.2	0.5
Others	10.8	14.5	11.4	19.7	16.8
Total	65.3	74.6	60.1	63.7	57.8
SORGHUM					
Exporters:					
U.S.	8.1	7.3	5.8	7.2	7.6
Argentina	0.7	1.2	1.3	1.6	1.3
Australia	0.3	0.0	0.2	0.1	0.2
Others	1.7	0.5	0.5	0.3	0.4
Total	10.8	9.0	7.8	9.1	9.5
Importers:					
Japan	4.1	3.9	3.6	3.5	3.3
Mexico	2.3	3.0	3.0	4.7	5.5
Taiwan	0.1	0.0	0.1	0.1	0.1
Venezuela	1.0	0.1	0.0	0.0	0.0
Israel	0.4	0.4	0.2	0.2	0.0
Former USSR	1.2	0.3	0.0	0.0	0.0
Others	1.7	1.3	1.0	0.8	0.6
Total	10.8	9.0	7.8	9.1	9.5
BARLEY					
Exporters:					
EC-12	9.0	6.7	7.5	8.8	10.0
Canada	3.4	3.7	4.5	3.5	3.3
Australia	1.4	2.4	2.7	2.5	2.6
U.S.	1.7	1.9	1.5	2.2	2.0
Others	1.6	1.0	2.0	2.9	1.2
Total	17.1	15.8	18.2	19.9	19.1
Importers:					
Saudi Arabia	4.6	3.3	4.5	6.0	5.0
Former USSR	3.5	4.9	4.9	5.7	4.9
East Europe	0.9	0.4	1.5	0.5	1.4
Japan	1.3	1.3	1.4	1.3	1.4
Others	6.8	5.9	6.0	6.3	6.5
Total	17.1	15.8	18.2	19.9	19.1
COARSE GRAINS					
TOTAL TRADE	96.2	102.0	87.9	95.5	88.9

1/ October-September year, excludes intra-EC trade. Totals might not add because of rounding. 2/ Forecast. 3/ Projected.

rica is likely to rebound in 1992/93, assuming normal weather. However, harvests usually do not begin until April or May, too late to reduce import needs significantly in the 1992/93 trade year.

In 1991/92, South Africa's corn imports are forecast at 2.7 million tons, up from 130,000 the previous year, and at 2.8 million in 1992/93. Combined imports for the other southern Africa countries are forecast at 2.4 million tons in 1991/92 and 1.9 million for 1992/93, compared with about 300,000 tons in 1990/91. The United States has been the main supplier to the region, followed by Argentina. Most of this corn is destined for human consumption, and the region has attempted to secure as much white corn---preferred to yellow---as possible. According to FGIS Weekly Inspections data, about 14 percent of the nearly 1.9 million tons of U.S. corn exported to the region through August 14th has been white. A sizable share of all U.S. corn exports to the region, except for South Africa, has consisted of donations and concessional sales.

Barley Trade To Slip From 1991/92 High

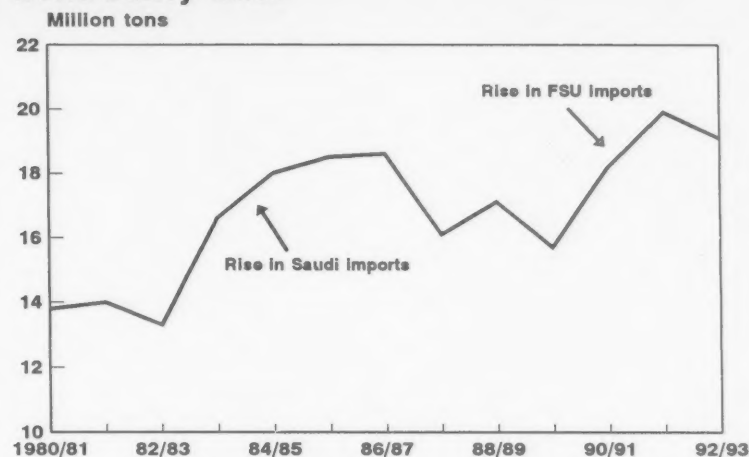
World trade in barley in 1992/93 is forecast to decline 4 percent to 19.1 million tons, partly reflecting tighter world supplies. However, this would be second only to the record volume of 19.9 million tons forecast for 1991/92. Lower imports for the FSU and Saudi Arabia in 1992/93 are forecast to be partly offset by higher shipments to other countries, especially Eastern Europe.

In recent years, trade has been bolstered by increased barley imports by the FSU, while its corn imports have slipped. This is because most of the countries providing export credits, donations, and entering barter arrangements with the FSU had surplus supplies of barley instead of corn. The EC has supplied most of this barley, followed by Canada, Scandinavia, Turkey, Eastern Europe, and the United States.

In 1991/92, world trade in barley is forecast to reach a record 19.9 million tons, about 8 percent higher than the old peak set in 1986/87. In addition to forecast imports of 5.7 million tons by the FSU, Saudi Arabia is expected to take 6 million tons, up one-third from the previous

Figure 21

World Barley Trade



Excludes intra-EC trade. Forecast for 1991/92 and 1992/93.

year. Saudi Arabia dominated the barley market in the early and mid-1980's, but cuts in Saudi import subsidies in the late 1980's led to reductions in Saudi imports and world trade.

Because of record large stocks, the EC is expected to increase barley exports in 1992/93 despite poor crop prospects. EC exports are forecast at 10 million tons, 1 million above the previous record set in 1988/89. This would propel the EC market share to over 50 percent. No other barley exporters are likely to increase exports in 1992/93 due to tight supplies. Given tighter supplies, U.S. exports of barley are forecast to fall to 2 million tons from the 2.2 million forecast in 1991/92.

World Oats Market To Tighten

Sharp reductions in oats crops in Sweden and Finland will lead to cuts in world trade in 1992/93. Larger acreage and production in Canada are expected to moderate the impact of lower supplies on the world import market, dominated by the United States. Canada's crop is forecast to rise 73 percent. However, there is still considerable uncertainty about Canada's exportable surplus because its crop is maturing slower than normal, while its carryin stocks are very low and there is some likelihood that tight supplies of barley could raise domestic oats feeding.

For the Scandinavian exporters, combined exportable oats supplies are forecast to decline 52 percent. A severe drought, reportedly the worst in 50 years, has led to a forecast fall of about 50 percent in Sweden's output and no oats are likely to be exported, compared with an estimated 464,000 tons in 1991/92. Finland's crop has also been hurt, forecast down 25 percent, but larger stocks may allow some exports, forecast at 200,000 tons compared with an estimated 440,000 in 1991/92. Poland, a smaller exporter, has also been affected, with its crop forecast to drop 25 percent, and is expected to have little, if any, to export.

Reflecting improved domestic crop prospects and the tighter exporter supplies, U.S. oats imports are forecast to decline 9 percent in the October-September 1992/93 trade year to 1 million tons. This accounts for the bulk of international trade, with only about 20 countries importing oats. Outside of the former Soviet Union, whose annual imports have averaged around 180,000 in the last 5 years, no other country imports more than 100,000 tons. U.S. imports in 1992/93 will hinge almost entirely on Canada, generally its leading supplier. Sweden was the largest U.S. supplier in the June-May 1991/92 crop year, accounting for 41 percent, Finland second with 32 percent, and Canada third with 22 percent.

[Peter Riley, (202) 219-0824]

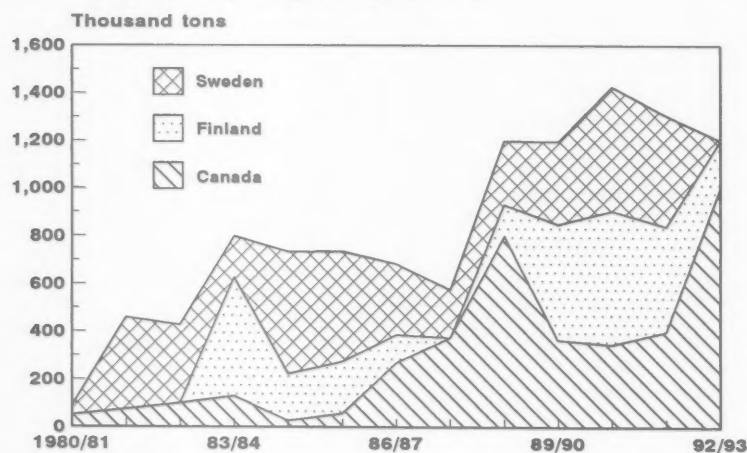
Table 5--U.S. Oats imports by country of origin, 1987/88-1991/92 1/

	1987/88	1988/89	1989/90	1990/91	1991/92
	Thousand metric tons				
Sweden	132	278	193	212	497
Finland	30	1	210	362	386
Canada	315	654	688	398	266
Poland	0	18	0	0	59
Argentina	187	41	0	0	0
Other	0	18	1	0	0
Total	664	1,010	1,092	972	1,207

1/ June-May year.

Figure 22

Oats Exports by Major Exporters



Forecast for 1991/92 and 1992/93.

List of Tables and Figures

Page

Text Tables:

1. Corn supply, disappearance, and stocks; March-May	6
2. Corn: Food, seed and industrial use, 1980/81-1992/93	15
3. Foreign coarse grain production, major countries and regions, 1990/91-1992/93	21
4. World coarse grain trade: Major exporters and importers by commodity, 1988/89-1992/93	24
5. U.S. Oats imports by country of origin, 1987/88-1991/92	26

Figures:

1. Feed grain production	4
2. Average high temperature during June	5
3. Average rainfall during July	5
4. Corn yields for selected states	6
5. Corn prices received by farmers	7
6. Malting barley premiums	9
7. Ratio of harvested to planted acres: Oats	10
8. Hay supplies and RCAU's	11
9. Feed use and grain consuming animal units	13
10. Corn and corn milling byproducts values	15
11. Railcar loadings of grain and soybeans	17
12. Railcar unloadings of grain	17
13. Rail rate index for grain	18
14. River stages at St. Louis	18
15. River stages at Sioux City	19
16. River stages at Kansas City	19
17. Average monthly grain shipments	20
18. Barge rates to New Orleans	20
19. U.S. corn and wheat monthly export prices	21
20. U.S. and foreign coarse grain exports	23
21. World barley trade	25
22. Oats exports by major exporters	26

Appendix Tables:

1. Feed grains: Marketing year supply and disappearance, 1985/86-1992/93	28
2. Foreign coarse grains: Supply and disappearance, 1980/88-1992/93	29
3. Corn: Marketing year supply and disappearance, area, and prices, 1985/86-1992/93	30
4. Sorghum: Marketing year supply and disappearance, area, and prices, 1985/86-1992/93	31
5. Barley: Marketing year supply and disappearance, area, and prices, 1985/86-1992/93	32
6. Oats: Marketing year supply and disappearance, area, and prices, 1985/86-1992/93	33
7. Corn: Marketing year supply and disappearance, 1985/86-1992/93	34
8. Sorghum: Marketing year supply and disappearance 1985/86-1992/93	35
9. Barley: Marketing year supply and disappearance, 1985/86-1992/93	36
10. Oats: Marketing year supply and disappearance, 1985/86-1992/93	37
11. Average prices received by farmers, United States, by month, and loan rate, 1983-92	38
12. Cash prices at principal markets, 1985-92	39
13. Feed-price ratios for livestock, poultry, and milk, by months, 1983-92	40
14. Price trends, selected feeds, and corn product	41
15. Corn, sorghum, barley, and oats exports, 1989/90 to date	42
16. Corn, sorghum, barley, and oats imports, 1989/90 to date	43
17. Shipments of grain on the Illinois Waterway and the Mississippi River (Locks 11-22), 1981/82-1991/92	44
18. Barge rates for grain shipments to New Orleans, Louisiana	44
19. Weekly average of rail car loadings of grain and soybeans, 1979/80-1991/92	45
20. Rail freight rate index for grain, crop years 1979/80-1991/92	45
21. Hay (all): Acreage, supply, and disappearance, 1985/86-1992/93	46
22. Hay: Average prices received by farmers United States, by months, 1983/84-1991/92	46

Appendix table 1--Feed grains: Marketing year supply and disappearance, area, and prices, 1985/86-1992/93 1/

Year 2/	Supply			Disappearance				Ending stocks					
	Begin- ning stocks	Produc- tion	Imports	Total	Food, alcohol, and industrial	Domestic use ----- Seed and residual	Feed and residual	Exports	Total disap- pearance	Govt. owned	Privately owned 3/	Total	
Million metric tons													
1985/86	57.5	274.3	0.8	332.6	33.5	1.5	135.1	170.0	36.1	206.2	20.4	106.0	126.4
1986/87	126.4	251.6	0.7	378.7	35.0	1.4	144.3	180.7	45.9	226.6	48.7	103.4	152.1
1987/88	152.1	216.5	1.0	369.6	35.9	1.3	146.7	183.9	52.1	236.0	34.1	99.5	133.6
1988/89	133.6	149.3	1.2	284.2	37.5	1.2	118.5	157.2	61.1	218.3	18.6	47.3	65.9
1989/90	65.9	221.0	1.3	288.2	39.2	1.1	132.7	173.0	69.7	242.7	10.5	35.0	45.5
1990/91	45.5	230.5	1.3	277.3	39.4	1.1	137.6	178.1	51.5	229.6	11.3	36.4	47.7
1991/92 4/	47.7	218.2	2.1	268.0	41.4	1.1	141.6	184.1	49.2	233.3	2.6	32.2	34.7
1992/93 5/	34.7	256.4	1.6	292.7	-----43.1-----		146.0	189.0	50.2	239.2			53.5

	Area		Harvested for grain	Yield per harvested hectare	Average price received by farmers 7/ participants	Government- support program Total payments to participants \$ million
	Set-aside and diverted 6/ -	planted				
Metric tons						
1977=100						
1985/86	2.9	51.8	45.2	6.07	110	8/ 2,874
1986/87	8.0	48.5	41.1	6.12	77	9/ 7,280
1987/88	12.5	43.1	35.2	6.15	99	9/ 8,447
1988/89	11.1	41.2	32.6	4.58	132	9/ 4,207
1989/90	6.8	42.9	36.8	6.00	120	8/ 4,091
1990/91	6.9	41.8	36.2	6.36	115	8/ 3,399
1991/92	5.1	42.3	37.2	5.91	120	8/ 2,427
1992/93	4.0	44.0	39.1	6.56		

1/ Aggregated data on corn, sorghum, barley, and oats. 2/ The marketing year for corn and sorghum begins September 1; for oats and barley, June 1. 3/ Includes total Government loans (original and resale). 4/ Preliminary. 5/ Projected. 6/ Includes diversion, acreage reduction, 0-92, and 50-92 programs. 7/ Excludes support payments. 8/ Deficiency payments. 9/ Excludes support payments.

Appendix table 2--Foreign coarse grains: Supply and disappearance, 1980/81-1992/93 1/

Year	Beginning stocks	Production	Feed	Total disappearance	Imports	Adjusted imports 2/	Ending stocks
Million metric tons							
Corn:							
1980/81	46.7	240.1	169.7	297.7	79.0	78.1	49.8
1981/82	49.8	235.1	177.5	291.2	77.7	67.3	44.5
1982/83	44.5	230.5	175.8	281.6	73.0	63.3	39.7
1983/84	39.7	241.5	169.2	288.5	64.8	61.1	40.6
1984/85	40.6	264.1	185.4	303.4	72.5	66.5	48.2
1985/86	48.2	254.0	187.9	291.2	62.0	54.2	41.9
1986/87	41.9	266.1	195.3	307.3	60.8	56.6	38.5
1987/88	38.5	269.3	200.5	312.6	63.6	56.6	38.8
1988/89	38.8	275.6	215.7	326.4	74.7	65.3	39.4
1989/90	39.4	271.0	212.2	334.7	82.2	74.6	35.8
1990/91	35.8	276.4	196.6	315.2	63.4	60.0	41.3
1991/92 3/	41.3	293.9	212.0	325.3	75.1	63.2	49.4
1992/93 4/	49.4	293.0	215.1	333.1	62.3	57.6	49.7
Sorghum:							
1980/81	7.0	44.6	23.1	50.8	12.8	14.1	8.2
1981/82	8.2	48.2	28.3	55.5	14.3	13.7	7.5
1982/83	7.5	43.9	25.0	50.5	12.3	11.6	6.2
1983/84	6.2	46.2	25.6	52.0	13.0	13.0	6.6
1984/85	6.6	43.8	25.9	51.9	12.9	13.1	6.1
1985/86	6.1	41.7	24.6	47.3	9.6	8.8	5.0
1986/87	5.0	40.5	23.1	46.3	8.1	7.8	4.3
1987/88	4.3	37.7	22.1	44.6	8.8	8.3	3.3
1988/89	3.3	39.9	23.7	46.4	11.0	10.8	4.7
1989/90	4.7	39.3	21.6	47.0	9.3	9.0	4.8
1990/91	4.8	37.9	20.9	44.5	8.0	7.8	4.0
1991/92 3/	4.0	37.0	21.2	44.0	9.4	9.1	4.2
1992/93 4/	4.2	39.9	21.7	47.8	9.3	9.5	4.0
Barley:							
1980/81	15.7	149.3	107.8	150.5	16.3	13.8	16.0
1981/82	16.0	139.2	105.4	143.6	20.4	13.9	13.5
1982/83	13.5	150.0	108.3	147.2	17.2	13.1	17.1
1983/84	17.1	147.2	115.7	154.2	20.2	16.4	11.9
1984/85	11.9	157.4	116.1	152.7	22.9	17.9	18.0
1985/86	18.0	159.9	120.4	156.3	22.1	18.2	21.9
1986/87	21.9	163.4	125.5	162.2	24.1	18.4	25.9
1987/88	25.9	162.5	128.2	166.3	20.8	15.7	24.5
1988/89	24.5	156.3	117.3	156.1	20.6	16.9	26.2
1989/90	26.2	155.8	121.5	159.7	20.7	15.6	23.8
1990/91	23.8	168.9	126.5	166.5	22.7	17.9	27.7
1991/92 3/	27.7	157.2	118.5	159.9	21.6	19.5	26.4
1992/93 4/	26.4	140.5	110.7	146.8	23.8	18.8	21.7
Total coarse grains: 5/							
1980/81	77.3	525.0	343.6	590.9	110.3	108.1	81.4
1981/82	81.4	512.1	353.3	580.0	114.6	97.5	72.7
1982/83	72.7	524.4	359.1	576.3	103.8	89.5	73.1
1983/84	73.1	540.2	366.2	598.0	99.6	92.8	70.7
1984/85	70.7	569.0	379.3	609.3	110.8	99.7	85.8
1985/86	85.8	558.6	389.1	698.4	95.5	82.3	81.2
1986/87	81.2	570.5	396.8	614.8	94.8	82.9	82.1
1987/88	82.1	567.6	403.8	621.3	95.2	82.9	79.5
1988/89	79.5	571.7	406.0	628.3	107.9	94.7	82.9
1989/90	82.9	571.4	419.0	645.2	114.2	100.7	77.6
1990/91	77.6	590.7	399.8	630.7	95.9	86.2	88.3
1991/92 3/	88.3	581.2	399.6	622.2	108.1	93.5	94.2
1992/93 4/	94.2	561.6	383.4	614.6	97.6	87.2	89.7

1/ Aggregated on basis of local marketing years, except for adjusted imports. 2/ Based on Oct./Sept. trade year and excludes intra-EC trade. 3/ Forecast. 4/ Projected. 5/ Includes oats, rye, millet, and mixed grains.

Source: Compiled from World Grain Situation and Outlook, Foreign Agricultural Service, and USDA data.

Year beginning September 1	Supply			Disappearance				Ending stocks Aug. 31				
	Begin- ning stocks	Produc- tion	Imports	Total	Disappearance		Govt. owned	Privately owned 1/				
					Food, alcohol, and industrial	Seed and residual			Exports	Total disap- pearance		
Million bushels												
1985/86	1,648.2	8,875.5	9.9	10,533.6	1,133.0	4,114.2	5,266.7	1,227.3	6,494.1	545.7	3,493.8	4,039.5
1986/87	4,039.5	8,225.8	1.8	12,267.0	1,206.8	4,669.4	5,892.9	1,492.5	7,385.3	1,443.2	3,438.5	4,881.7
1987/88	4,881.7	7,131.3	3.4	12,016.4	1,226.0	4,797.7	6,040.9	1,716.4	7,757.3	835.0	3,424.1	4,259.1
1988/89	4,259.1	4,928.7	2.8	9,190.6	1,275.0	3,940.9	5,234.3	2,025.8	7,260.1	362.5	1,567.9	1,930.4
1989/90	1,930.4	7,525.5	1.9	9,457.8	1,337.0	4,389.2	5,745.1	2,368.2	8,113.4	233.0	1,111.5	1,344.5
1990/91	1,344.5	7,934.0	3.4	9,281.9	1,347.9	4,668.8	6,036.0	1,724.6	7,760.7	371.1	1,150.1	1,521.2
1991/92 2/	1,521.2	7,474.5	20.0	9,015.7	1,424.8	4,900.0	6,345.0	1,575.0	7,920.0	90.0	1,005.7	1,095.7
1992/93 3/	1,095.7	8,762.1	10.0	9,867.8	---	5,000.0	6,465.0	1,600.0	8,065.0	---	---	1,802.8

	Set-aside and diverted 4/	Area		Yield harvested per acre	Received by farmers 5/	Average prices			Government-support program		
		Planted	Harvested grain			St. Louis No. 2 yellow	Omaha No. 2 yellow	Gulf Ports No. 2 yellow	National average loan rate	Target price	Total payments to participants
						-----\$/bu.-----			----- \$ million -----		
						Bushels					
1985/86	5.4	83.4	75.2	118.0	2.23	2.37	2.25	2.52	2.55	3.03	6/ 2,479
1986/87	14.3	76.6	68.9	119.4	1.50	1.68	1.53	1.83	1.92	3.03	7/ 6,327
1987/88	23.1	66.2	59.5	119.8	1.94	2.19	1.98	2.39	1.82	3.03	7/ 7,378
1988/89	20.5	67.7	58.3	84.6	2.54	2.72	2.49	2.93	1.77	2.93	8/ 3,625
1989/90	10.8	72.2	64.7	116.3	2.36	2.58	2.41	2.79	1.65	2.84	9/ 3,589
1990/91	10.7	74.2	67.0	118.5	2.28	2.49	2.28	2.67	1.57	2.75	6/ 3,015
1991/92	7.4	76.0	68.8	108.6	2.37	2.55	2.38	2.78	1.62	2.75	6/ 2,080
1992/93	5.3	79.3	72.2	121.3	1.85-2.25						

1/ Includes quantity under loan and farmer-owned reserve. 2/ Preliminary. 3/ Projected. 4/ Includes diversion, acreage reduction, 0-92, and 50-92 programs; 0-92, and 50-92 set-aside included acreage and acreage planted to minor oilseeds. 5/ Excludes support payments. 6/ Deficiency payments. 7/ Deficiency and diversion payments. 8/ Deficiency, diversion, and disaster payments. 9/ Deficiency and disaster payments.

Appendix table 4--Sorghum: Marketing year supply and disappearance, area, and prices, 1985/86-1992/93

Year beginning September 1	Supply				Disappearance				Ending stocks Aug. 31				
	Begin- ning stocks	Produc- tion	Imports	Total	Food, alcohol, and industrial	Domestic use		Exports	Total disap- pearance	Govt. owned	Privately owned 1/	Total	
						Seed	Feed and residual						
Million bushels													
1985/86	300.3	1,120.3	0.0	1,420.6	26.0	1.7	663.9	691.6	178.0	869.6	207.2	343.8	551.0
1986/87	551.0	938.9	0.0	1,489.9	10.4	1.6	536.2	548.2	198.3	746.5	408.9	334.4	743.3
1987/88	743.3	730.8	0.0	1,474.1	23.5	1.3	555.1	579.9	231.6	811.5	463.6	199.1	662.7
1988/89	662.7	576.7	0.0	1,239.3	20.5	1.5	466.3	488.3	311.5	799.8	340.9	98.6	439.5
1989/90	439.5	615.4	0.2	1,055.2	13.6	1.3	517.3	532.2	303.2	835.4	162.5	57.3	219.8
1990/91	219.8	573.3	0.1	793.1	7.3	1.4	409.8	418.5	232.0	650.5	64.7	77.9	142.6
1991/92 2/	142.6	579.5	0.0	722.1	7.5	1.7	345.0	354.2	280.0	634.2	5.0	82.9	87.9
1992/93 3/	87.9	833.6	0.0	921.4	---10.0---	---	475.0	485.0	300.0	785.0	---	---	136.4
Set-aside and diverted 4/	Area		Yield		Average prices				Government-support program				
	Planted	Harvested for grain	per acre harvested	Received by farmers 5/	Kansas city No. 2 yellow		Texas No. 2 yellow	Gulf Ports No. 2 yellow	National average loan rate	Target price	Total payments to participants \$ million		
					No. 2 yellow	No. 2 yellow							
--- Million acres --- \$/cwt. ---													
1985/86	0.9	18.3	16.8	66.8	3.45	3.72	3.72	4.32	4.07	4.32	5.14	6/ 228	
1986/87	2.9	15.3	13.9	67.7	2.45	2.73	2.73	3.24	3.22	3.25	5.14	7/ 570	
1987/88	4.1	11.8	10.5	69.4	3.04	3.40	3.40	3.81	3.96	3.11	5.14	7/ 708	
1988/89	3.9	10.3	9.0	63.8	4.05	4.17	4.17	4.66	4.81	3.00	4.96	8/ 352	
1989/90	3.3	12.6	11.1	55.4	3.75	4.21	4.21	4.38	4.76	2.80	4.82	9/ 421	
1990/91	3.3	10.5	9.1	63.1	3.79	4.08	4.08	4.48	4.65	2.66	4.66	6/ 317	
1991/92	2.4	11.0	9.8	59.0	4.07	4.41	4.41	4.80	4.99	2.75	4.66	6/ 175	
1992/93	1.9	13.5	12.3	67.7	1.75-2.15	---	---	---	---	2.91	4.66	---	

1/ Includes quantity under loan and farmer-owned reserve. 2/ Preliminary. 3/ Projected. 4/ Includes diversion, acreage reduction, 0-92, and 50-92 programs; 0-92, and 50-92 set-aside include idled acreage and acreage planted to minor oilseeds. 5/ Excludes support payments. 6/ Deficiency payments. 7/ Deficiency and diversion payments. 8/ Deficiency, diversion and disaster payments. 9/ Deficiency and disaster payments.

Appendix table 5--Barley: Marketing year supply and disappearance, area, and prices, 1985/86-1992/93

Year beginning June 1	Begin- ning stocks	Supply			Disappearance				Ending stocks May 31				
		Produc- tion	Imports	Total	Food, alcohol, and industrial	Domestic use		Exports	Total disap- pearance	Govt. owned	Privately owned 1/	Total	
						Seed	Feed and residual						
Million bushels													
1985/86	247.4	590.2	6.2	843.9	156.5	21.3	319.1	496.9	19.7	516.7	57.4	269.8	327.2
1986/87	327.2	608.5	6.7	942.4	156.9	17.9	297.7	472.5	133.6	606.1	75.5	260.8	336.3
1987/88	336.3	521.5	11.3	869.1	158.1	15.7	253.2	427.0	121.0	548.0	50.1	271.0	321.1
1988/89	321.1	290.0	10.5	621.6	160.4	15.0	170.9	346.3	78.9	425.2	30.4	166.0	196.4
1989/90	196.4	404.2	13.1	613.7	162.0	13.5	193.3	368.8	84.0	452.9	19.3	141.5	160.8
1990/91	160.8	422.2	13.5	596.5	161.1	14.6	204.8	380.5	80.6	461.1	8.4	127.0	135.4
1991/92 2/	135.4	464.5	24.5	624.4	158.0	12.8	229.0	399.8	94.5	494.4	6.5	123.5	130.0
1992/93 3/	130.0	394.9	20.0	544.9	---	170.0	---	340.0	90.0	430.0	---	---	114.9

Year	Set-aside and diverted 4/	Area		Yield per acre	Average prices--			Government-support program			
		Planted	Harvested for grain		Received by farmers 5/	Wineap's 6/		National average loan rate	Target price	Total payments to participants	
						No. 2 or better feed 6/	No. 3 or better malting				Portland No. 2
-\$/bu.										-\$ million	
1985/86	0.7	13.2	11.6	51.0	1.98	1.53	2.24	2.23	2.08	2.60	7/ 159
1986/87	2.0	13.1	12.0	50.8	1.61	1.44	1.89	1.96	1.56	2.60	8/ 351
1987/88	2.9	11.0	10.0	52.4	1.81	1.78	2.04	2.09	1.49	2.60	8/ 335
1988/89	2.8	9.8	7.6	38.0	2.79	2.32	4.11	2.74	1.44	2.51	9/ 181
1989/90	2.3	9.1	8.3	48.6	2.42	2.20	3.28	2.61	1.34	2.43	10/ 78
1990/91	2.9	8.2	7.5	56.1	2.14	2.13	2.42	2.65	1.28	2.36	7/ 59
1991/92	2.2	8.9	8.4	55.2	2.10	2.17	2.38	2.66	1.32	2.36	7/ 172
1992/93	2.1	7.8	7.3	54.1	1.90-2.30		---	---	1.40	2.36	---

1/ Includes quantity under loan and farmer-owned reserve. 2/ Preliminary. 3/ Projected. 4/ Includes diversion, acreage reduction, 0-92, and 50-92 programs; 0-92, and 50-92 set-aside include idled acreage and acreage planted to minor oilseeds. 5/ Excludes support payments. 6/ Starting March 1987, shifted to Duluth. 7/ Deficiency payments. 8/ Deficiency and diversion payments. 9/ Deficiency, diversion and disaster payments. 10/ Deficiency and disaster payments.

Appendix table 7--Corn: Marketing year supply and disappearance, specified periods, 1985/86-1992/93

Year beginning September 1	Supply			Disappearance			Ending stocks				
	Begin- ning stocks	Produc- tion	Imports	Total	Domestic use ¹		Exports	Total disap- pearance	Govt. owned	Privately owned 1/ Total	
					Food, alcohol, and industrial	Seed and residual					
Million bushels											
1985/86:											
Sept.-Nov.	1,648.2	8,875.5	0.9	10,524.5	276.3	0.0	1,218.7	1,495.0	388.6	8,226.1	8,614.7
Dec.-Feb.	8,614.7	---	1.0	8,615.7	262.4	0.0	1,306.0	1,568.3	509.4	6,077.7	6,587.1
Mar.-May	6,587.1	---	2.2	6,589.3	291.2	16.1	1,090.6	1,397.9	550.9	4,439.1	4,990.0
June-Aug.	4,990.0	---	5.9	4,995.9	303.1	3.4	499.0	805.5	545.7	3,493.8	4,039.5
Mkt. year	1,648.2	8,875.5	9.9	10,533.6	1,133.0	19.5	4,114.2	5,266.7	1,494.1	3,493.8	4,039.5
1986/87:											
Sept.-Nov.	4,039.5	8,225.8	0.7	12,266.0	287.6	0.0	1,354.7	1,642.3	968.2	9,337.3	10,305.5
Dec.-Feb.	10,305.5	---	0.2	10,305.7	277.3	0.0	1,467.3	1,744.6	1,362.2	6,886.0	8,248.2
Mar.-May	8,248.2	---	0.4	8,248.6	318.4	16.4	1,085.6	1,420.4	1,491.5	4,840.7	6,332.2
June-Aug.	6,332.2	---	0.4	6,332.6	323.5	0.3	761.8	1,085.6	1,443.2	3,438.5	4,881.7
Mkt. year	4,039.5	8,225.8	1.8	12,267.0	1,206.8	16.7	4,669.4	5,892.9	1,443.2	3,438.5	4,881.7
1987/88:											
Sept.-Nov.	4,881.7	7,131.3	0.6	12,013.6	295.4	0.0	1,551.6	1,847.0	1,683.4	8,087.6	9,771.0
Dec.-Feb.	9,771.0	---	0.7	9,771.7	283.3	0.0	1,446.1	1,731.4	1,767.7	5,867.9	7,635.6
Mar.-May	7,635.6	---	1.4	7,637.0	318.6	16.7	952.8	1,288.1	1,304.9	4,534.3	5,839.2
June-Aug.	5,839.2	---	0.8	5,840.0	326.7	0.5	847.2	1,174.4	835.0	3,424.1	4,259.1
Mkt. year	4,881.7	7,131.3	3.4	12,016.4	1,226.0	17.2	4,797.7	6,040.9	7,757.3	3,424.1	4,259.1
1988/89:											
Sept.-Nov.	4,259.1	4,928.7	0.6	9,188.4	305.2	0.0	1,340.8	1,646.0	611.0	6,460.6	7,071.6
Dec.-Feb.	7,071.6	---	0.6	7,072.2	294.9	0.0	1,071.6	1,366.4	465.0	4,738.9	5,203.9
Mar.-May	5,203.9	---	1.2	5,205.1	333.3	16.7	846.1	1,196.1	417.7	3,001.6	3,419.3
June-Aug.	3,419.3	---	0.4	3,419.7	341.6	1.7	682.5	1,025.8	362.5	1,567.9	1,930.4
Mkt. year	4,259.1	4,928.7	2.8	9,190.6	1,275.0	18.4	3,940.9	5,234.3	362.5	1,567.9	1,930.4
1989/90:											
Sept.-Nov.	1,930.4	7,525.5	0.642	9,456.6	295.6	0.0	1,496.6	1,792.2	628.2	6,453.9	7,082.1
Dec.-Feb.	7,082.1	---	0.439	7,082.5	306.1	0.0	1,282.2	1,588.3	537.2	4,275.2	4,812.4
Mar.-May	4,812.4	---	0.619	4,813.0	369.2	16.7	986.4	1,369.2	299.3	2,543.9	2,843.2
June-Aug.	2,843.2	---	0.202	2,843.4	369.2	2.2	624.0	995.4	233.0	1,111.5	1,344.5
Mkt. year	1,930.4	7,525.5	1.902	9,457.8	1,337.0	18.9	4,389.2	5,745.1	233.0	1,111.5	1,344.5
1990/91:											
Sept.-Nov.	1,344.5	7,934.0	0.885	9,279.4	321.7	0.0	1,636.4	1,958.2	205.9	6,734.4	6,940.3
Dec.-Feb.	6,940.3	---	0.275	6,940.6	312.5	0.0	1,368.4	1,680.9	195.6	4,583.4	4,789.0
Mar.-May	4,789.0	---	0.783	4,789.8	351.1	17.6	975.5	1,344.2	435.9	2,556.1	2,992.0
June-Aug.	2,992.0	---	1.472	2,993.4	362.5	1.7	688.6	1,052.8	371.1	1,150.1	1,521.2
Mkt. year	1,344.5	7,934.0	3.4	9,281.9	1,347.9	19.3	4,668.8	6,036.0	371.1	1,150.1	1,521.2
1991/92:											
Sept.-Nov.	1,521.2	7,474.5	6.5	9,002.2	351.1	0.0	1,688.9	2,040.0	249.7	6,291.4	6,541.1
Dec.-Feb.	6,541.1	---	4.4	6,545.5	336.6	0.0	1,286.3	1,622.9	199.2	4,561.8	4,761.0
Mar.-May	4,561.0	---	5.4	4,566.4	361.0	19.9	1,075.5	1,456.4	147.2	2,521.4	2,668.6
June-Aug.	2,738.6	---	3.7	2,742.3	376.2	0.3	849.3	1,225.8	90.0	1,005.7	1,095.7
Mkt. year 2/	1,521.2	7,474.5	20.0	9,015.7	1,424.8	20.2	4,900.0	6,345.0	90.0	1,005.7	1,095.7
1992/93:											
Mkt. year 3/	1,095.7	8,762.1	10.0	9,867.8	---	---	5,000.0	6,465.0	---	---	1,802.8

--- = Not applicable.

1/ Includes quantity under loan and farmer-owned reserve. 2/ Preliminary. 3/ Projected.

Appendix table 8--Sorghum: Marketing year supply and disappearance, 1985/86-1992/93

Year beginning September 1	Supply			Disappearance			Ending stocks				
	Begin- ning stocks	Produc- tion	Imports	Total	Food, alcohol and industrial	Domestic use-- Seed and residual	Exports	Total disap- pearance	Govt. owned	Privately owned 1/	Total
Million bushels											
1985/86:											
Sept.-Nov.	300.3	1,120.3	0.0	1,420.6	7.6	0.0	230.4	308.3	138.6	973.7	1,112.3
Dec.-Feb.	1,112.3	---	0.0	1,112.3	7.9	0.0	232.6	283.9	175.2	653.3	828.5
Mar.-May	828.5	---	0.0	828.5	6.6	0.2	163.7	198.4	181.4	448.6	630.0
June-Aug.	630.0	---	0.0	630.0	3.9	0.5	36.9	79.0	207.2	343.8	551.0
Mkt. year	300.3	1,120.3	0.0	1,420.6	26.0	1.7	663.9	869.6	207.2	343.8	551.0
1986/87:											
Sept.-Nov.	551.0	938.9	0.0	1,489.9	2.8	0.0	180.4	230.7	292.1	967.1	1,259.2
Dec.-Feb.	1,259.2	---	0.0	1,259.2	2.9	0.0	182.3	241.4	364.9	652.8	1,017.7
Mar.-May	1,017.7	---	0.0	1,017.7	2.4	1.0	128.2	182.8	400.4	434.6	835.0
June-Aug.	835.0	---	0.0	835.0	2.2	0.6	45.3	91.6	408.9	334.4	743.3
Mkt. year	551.0	938.9	0.0	1,489.9	10.4	1.6	536.2	746.5	408.9	334.4	743.3
1987/88:											
Sept.-Nov.	743.3	730.8	0.0	1,474.1	4.9	0.0	171.3	221.7	465.3	787.1	1,252.4
Dec.-Feb.	1,252.4	---	0.0	1,252.4	5.1	0.0	173.1	241.3	545.5	465.6	1,011.1
Mar.-May	1,011.1	---	0.0	1,011.1	4.2	0.8	121.2	203.3	511.4	296.4	807.8
June-Aug.	807.8	---	0.0	807.9	9.3	0.5	89.6	145.2	463.6	199.1	662.7
Mkt. year	743.3	730.8	0.0	1,474.1	23.5	1.3	555.1	811.5	463.6	199.1	662.7
1988/89:											
Sept.-Nov.	662.7	576.7	0.0	1,239.3	5.9	0.0	171.3	241.6	432.9	564.8	997.7
Dec.-Feb.	997.7	---	0.0	997.7	6.1	0.0	173.1	272.6	396.4	328.7	725.1
Mar.-May	725.1	---	0.0	725.1	5.0	0.8	79.7	166.1	363.8	195.2	559.0
June-Aug.	559.0	---	0.0	559.0	3.5	0.7	42.3	119.5	340.9	98.6	439.5
Mkt. year	662.7	576.7	0.0	1,239.3	20.5	1.5	466.3	799.8	340.9	98.6	439.5
1989/90:											
Sept.-Nov.	439.5	615.4	0.0	1,054.9	3.6	0.0	185.8	279.3	314.6	461.0	775.6
Dec.-Feb.	775.6	---	0.0	775.6	4.4	0.0	176.5	262.0	223.0	290.6	513.6
Mar.-May	513.6	---	0.1	513.7	2.5	0.7	94.2	178.7	190.2	144.8	335.0
June-Aug.	335.0	---	0.1	335.1	3.1	0.6	60.9	115.3	162.5	57.3	219.8
Mkt. year	439.5	615.4	0.2	1,055.2	13.6	1.3	517.3	835.4	162.5	57.3	219.8
1990/91:											
Sept.-Nov.	219.8	573.3	0.0	793.1	1.8	0.0	222.3	280.7	157.7	354.6	512.3
Dec.-Feb.	512.3	---	0.0	512.3	1.9	0.0	116.3	179.5	149.6	183.3	332.9
Mar.-May	332.9	---	0.1	332.9	1.8	0.7	32.4	110.9	108.4	113.6	222.0
June-Aug.	222.0	---	0.0	222.0	1.8	0.7	38.8	79.4	64.7	77.9	142.6
Mkt. year	219.8	573.3	0.1	793.1	7.3	1.4	409.8	650.5	64.7	77.9	142.6
1991/92:											
Sept.-Nov.	142.6	579.5	0.0	722.1	1.9	0.0	223.4	271.6	34.3	416.2	450.5
Dec.-Feb.	450.5	---	0.0	450.5	2.0	0.0	91.0	199.2	19.6	231.6	251.2
Mar.-May	251.2	---	0.0	251.2	1.9	1.1	35.9	140.9	14.3	96.1	110.4
June-Aug.	110.4	---	0.0	110.4	1.7	0.6	(0.3)	22.5	5.0	82.9	87.9
Mkt. year 2/	142.6	579.5	0.0	722.1	7.5	1.7	345.0	634.2	5.0	82.9	87.9
1992/93:											
Mkt. year 3/	87.9	833.6	0.0	921.4	-----10.0----		475.0	785.0			136.4

--- = Not applicable.

1/ Includes quantity under loan and farmer-owned reserve. 2/ Preliminary. 3/ Projected.

Appendix table 9-Barley: Marketing year supply and disappearance, specified periods, 1985/86-1992/93

Year beginning June 1	Supply				Disappearance				Ending stocks				
	Begin- ning stocks	Produc- tion	Imports	Total	Food, alcohol, and industrial	Domestic use—		Exports	Total disap- pearance	Govt. owned	Privately owned 1/	Total	
						Seed and residual	Feed						
Million bushels													
1985/86:													
June-Aug.	247.4	590.2	0.7	838.3	41.6	0.0	88.0	129.6	10.4	140.0	20.0	678.3	698.3
Sept.-Nov.	698.3	---	1.3	699.6	35.8	1.5	82.9	120.3	7.3	127.5	36.1	536.0	572.1
Dec.-Feb.	572.1	---	2.5	574.6	35.8	1.7	71.1	108.7	1.3	109.9	47.3	417.4	467.7
Mar.-May	464.7	---	1.7	466.4	43.3	18.1	77.1	138.5	0.8	139.2	57.4	269.8	327.2
Mkt. year	247.4	590.2	6.2	843.9	156.5	21.3	319.1	496.9	19.7	516.7	57.4	269.8	327.2
1986/87:													
June-Aug.	327.2	608.5	1.3	937.1	42.4	0.0	94.4	136.8	13.5	150.3	56.0	730.8	786.8
Sept.-Nov.	786.8	---	1.0	787.8	36.7	1.3	72.0	110.0	43.5	153.5	66.2	568.1	634.3
Dec.-Feb.	634.3	---	3.1	635.4	36.0	15.2	67.0	104.4	31.8	136.2	73.2	424.1	499.3
Mar.-May	499.3	---	3.1	502.4	41.8	15.2	64.3	121.3	44.8	166.1	75.5	260.8	336.3
Mkt. year	327.2	608.5	6.7	942.4	156.9	17.9	297.7	472.5	133.6	606.1	75.5	260.8	336.3
1987/88:													
June-Aug.	336.3	521.5	1.1	858.9	42.7	0.0	74.3	117.1	16.8	133.9	74.9	650.1	725.0
Sept.-Nov.	725.0	---	2.9	727.9	37.1	1.1	64.8	103.0	42.5	145.5	79.5	502.9	582.4
Dec.-Feb.	582.4	---	4.3	586.7	36.3	1.3	57.6	95.2	33.0	128.2	57.0	401.5	458.5
Mar.-May	458.5	---	3.0	461.5	42.0	13.3	56.5	111.8	28.6	140.4	50.1	271.0	321.1
Mkt. year	336.3	521.5	11.3	869.1	158.1	15.7	253.2	427.0	121.0	548.0	50.1	271.0	321.1
1988/89:													
June-Aug.	321.1	290.0	2.8	613.9	44.0	0.0	93.7	137.7	25.8	163.5	35.9	414.5	450.4
Sept.-Nov.	450.4	---	2.2	452.6	38.4	1.1	28.4	67.8	12.6	80.5	35.9	336.2	372.1
Dec.-Feb.	280.6	---	2.8	283.3	41.8	12.7	41.6	79.1	15.3	94.3	34.1	246.5	280.6
Mkt. year	321.1	290.0	10.5	621.6	160.4	15.0	170.9	346.3	78.9	425.2	30.4	166.0	196.4
1989/90:													
June-Aug.	196.4	404.2	3.6	604.2	45.7	0.0	114.0	159.7	26.5	186.2	36.6	381.3	417.9
Sept.-Nov.	417.9	---	2.0	419.9	39.3	0.9	11.9	52.1	17.2	69.3	36.3	314.3	350.6
Dec.-Feb.	350.6	---	3.3	353.9	37.2	1.1	40.2	78.5	22.7	101.2	32.1	220.6	252.7
Mar.-May	252.7	---	4.2	256.9	39.8	11.5	27.3	78.5	17.6	96.1	19.3	141.5	160.8
Mkt. year	196.4	404.2	13.1	613.7	162.0	13.5	193.3	368.8	84.0	452.9	19.3	141.5	160.8
1990/91:													
June-Aug.	160.8	422.2	1.0	584.0	44.7	0.0	97.6	142.3	30.9	173.2	14.3	396.6	410.9
Sept.-Nov.	410.9	---	1.3	412.1	39.0	1.0	41.2	81.2	25.2	106.4	12.1	293.6	305.7
Dec.-Feb.	305.7	---	4.2	309.9	37.6	1.2	41.7	80.4	18.6	99.0	9.6	201.3	210.9
Mar.-May	210.9	---	7.0	217.9	39.8	12.4	24.3	76.6	6.0	82.5	8.4	127.0	135.4
Mkt. year	160.8	422.2	13.5	596.5	161.1	14.6	204.8	380.5	80.6	461.1	8.4	127.0	135.4
1991/92:													
June-Aug.	135.4	464.5	7.4	607.3	44.7	0.0	109.2	153.9	13.5	167.4	7.7	432.3	440.0
Sept.-Nov.	440.0	---	3.5	443.4	37.8	0.9	39.6	78.3	36.7	115.0	7.0	321.4	328.4
Dec.-Feb.	328.4	---	2.5	330.8	36.5	1.0	56.8	94.3	24.6	119.0	6.8	209.1	215.9
Mar.-May 2/	215.9	---	7.2	223.1	39.0	10.9	23.4	73.3	19.7	93.0	6.5	123.5	130.0
Mkt. year 2/	135.4	464.5	24.5	624.4	158.0	12.8	229.0	399.8	94.5	494.4	6.5	123.5	130.0
1992/93:													
Mkt. year 3/	130.0	394.9	20.0	544.9	---	---	170.0	340.0	90.0	430.0	---	---	114.9

--- = Not applicable.

1/ Includes quantity under loan and farmer-owned reserve. 2/ Preliminary. 3/ Projected.

Appendix table 10--Oats: Marketing year supply and disappearance, 1985/86-1992/93

Year beginning June 1	Supply				Disappearance				Ending stocks					
	Begin- ning stocks	Produc- tion	Imports	Total	Food, alcohol, and industrial	Domestic use			Exports	Total disap- pearance	Govt. owned	Privately owned	Total	
						Seed	Feed and residual	Total						
														Million bushels
1985/86:														
June-Aug.	179.9	518.5	4.4	702.8	12.8	0.0	135.8	148.7	0.1	148.8	1.5	552.6	554.1	
Sept.-Nov.	554.1	---	4.2	558.3	11.2	3.9	118.1	133.2	0.3	133.5	1.9	422.9	424.8	
Dec.-Feb.	424.8	---	8.6	433.7	10.9	1.0	109.3	121.2	0.1	121.3	2.0	310.4	312.4	
Mar.-May	312.4	---	9.7	322.1	9.0	27.6	101.0	137.7	0.8	138.4	1.9	181.8	183.7	
Mkt. year	179.9	518.5	27.2	725.6	44.0	32.5	464.2	540.7	1.2	541.9	1.9	181.8	183.7	
1986/87:														
June-Aug.	183.7	385.0	8.7	577.4	13.1	0.0	112.5	125.6	0.2	125.9	2.4	449.1	451.5	
Sept.-Nov.	451.5	---	4.8	456.3	11.5	4.6	97.8	113.9	0.3	114.2	3.2	339.0	342.2	
Dec.-Feb.	342.2	---	9.2	351.4	11.1	1.1	90.5	102.8	0.1	102.9	3.6	244.9	248.5	
Mar.-May	248.5	---	9.6	258.1	9.3	32.3	83.7	125.2	0.3	125.5	3.5	129.1	132.6	
Mkt. year	183.7	385.0	32.4	601.0	45.0	38.0	384.5	467.5	0.9	468.4	3.5	129.1	132.6	
1987/88:														
June-Aug.	132.6	373.7	7.0	513.3	14.5	0.0	104.8	119.3	0.2	119.5	3.3	390.5	393.8	
Sept.-Nov.	393.8	---	8.1	401.9	12.7	3.8	91.1	107.6	0.1	107.8	3.4	290.7	294.1	
Dec.-Feb.	294.1	---	15.8	309.9	12.3	0.9	84.3	97.6	0.1	97.7	3.4	208.8	212.2	
Mar.-May	212.2	---	14.8	227.0	10.2	26.9	77.9	115.0	0.1	115.1	3.5	108.4	111.9	
Mkt. year	132.6	373.7	45.7	552.0	49.8	31.6	358.2	439.6	0.5	440.1	3.5	108.4	111.9	
1988/89:														
June-Aug.	111.9	217.6	12.3	341.8	21.2	0.0	56.7	77.9	0.2	78.1	3.0	260.7	263.7	
Sept.-Nov.	263.7	---	11.9	275.6	18.6	3.3	49.3	71.1	0.1	71.3	2.5	201.9	204.4	
Dec.-Feb.	204.4	---	20.1	224.5	15.0	0.8	45.6	64.4	0.2	64.6	2.6	157.2	159.8	
Mar.-May	159.8	---	18.6	178.5	15.0	23.0	42.2	80.1	0.1	80.2	2.4	95.9	98.3	
Mkt. year	111.9	217.6	62.9	392.4	72.7	27.1	193.8	293.6	0.6	294.2	2.4	95.9	98.3	
1989/90:														
June-Aug.	98.3	373.6	17.0	488.9	26.6	0.0	88.7	115.3	0.2	115.6	1.3	372.0	373.3	
Sept.-Nov.	373.3	---	17.5	390.8	23.3	2.7	77.1	103.2	0.3	103.4	1.2	286.2	287.4	
Dec.-Feb.	287.4	---	15.7	303.1	22.6	0.7	64.9	88.2	0.2	88.3	1.1	213.6	214.7	
Mar.-May	214.7	---	16.3	231.0	19.1	20.0	34.8	73.9	0.2	74.1	0.7	156.2	156.9	
Mkt. year	98.3	373.6	66.4	538.3	91.6	23.4	265.6	380.6	0.8	381.4	0.7	156.2	156.9	
1990/91:														
June-Aug.	156.9	357.5	17.5	532.0	28.7	0.0	151.4	180.1	0.2	180.3	0.6	351.1	351.7	
Sept.-Nov.	351.7	---	11.7	363.4	24.7	2.2	42.1	69.1	0.2	69.3	0.6	293.5	294.1	
Dec.-Feb.	294.1	---	18.2	312.3	24.6	0.5	57.9	83.0	0.1	83.1	0.5	228.8	229.3	
Mar.-May	229.3	---	16.0	245.2	22.9	16.4	34.6	73.9	0.1	74.0	0.3	170.9	171.2	
Mkt. year	156.9	357.5	63.4	577.8	100.9	19.1	286.0	406.0	0.6	406.6	0.3	170.9	171.2	
1991/92:														
June-Aug.	171.2	242.5	21.7	435.5	30.5	0.0	120.8	151.3	0.1	151.4	0.3	283.8	284.1	
Sept.-Nov.	284.1	---	17.3	301.4	26.5	2.1	28.0	56.6	0.2	56.8	0.3	244.3	244.6	
Dec.-Feb.	244.6	---	17.6	262.3	26.0	0.5	40.7	87.2	0.2	87.4	0.3	174.6	174.9	
Mar.-May 1/	174.9	---	18.1	193.0	23.9	15.5	25.5	64.9	1.4	66.3	0.2	126.5	126.7	
Mkt. year 1/	171.2	242.5	74.8	488.5	106.9	18.1	234.9	359.9	1.9	361.8	0.2	126.5	126.7	
1992/93:														
Mkt. year 2/	126.7	276.4	65.0	468.1	---	---	220.0	350.0	1.0	351.0	---	---	117.1	

1/ Preliminary. 2/ Projected.

Appendix table 11--Average prices received by farmers, United States, by month, and loan rate, 1983-92 1/

Year	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July 2/	Aug.	Average 3/	Loan rate
Corn:														
	\$/bu.													
1983	3.32	3.15	3.17	3.15	3.15	3.11	3.21	3.32	3.34	3.36	3.30	3.12	3.21	2.65
1984	2.90	2.65	2.55	2.56	2.64	2.62	2.67	2.70	2.68	2.64	2.60	2.44	2.63	2.55
1985	2.29	2.11	2.21	2.29	2.33	2.32	2.29	2.30	2.39	2.32	2.00	1.73	2.23	2.55
1986	1.45	1.40	1.47	1.50	1.48	1.42	1.47	1.52	1.66	1.69	1.60	1.47	1.50	1.92
1987	1.49	1.55	1.61	1.72	1.77	1.83	1.86	1.88	1.94	2.41	2.72	2.65	1.94	1.82
1988	2.60	2.58	2.51	2.53	2.60	2.59	2.60	2.56	2.58	2.52	2.47	2.27	2.54	1.77
1989	2.29	2.22	2.24	2.27	2.31	2.32	2.37	2.51	2.62	2.63	2.62	2.51	2.36	1.65
1990	2.32	2.19	2.16	2.22	2.27	2.32	2.39	2.42	2.38	2.31	2.27	2.33	2.28	1.57
1991	2.33	2.31	2.29	2.33	2.40	2.47	2.49	2.48	2.48	2.47	2.28		2.37	1.62
Sorghum:														
	\$/cwt.													
1983	5.26	5.01	4.98	4.93	4.92	4.74	4.85	5.00	5.08	4.94	4.64	4.58	4.89	4.50
1984	4.24	4.05	4.05	4.15	4.16	4.10	4.24	4.46	4.54	4.52	4.04	3.74	4.15	4.32
1985	3.27	3.30	3.47	3.76	3.69	3.55	3.67	3.80	3.99	3.43	3.06	2.66	3.45	4.32
1986	2.36	2.34	2.39	2.41	2.37	2.36	2.44	2.58	2.69	2.79	2.66	2.52	2.45	3.25
1987	2.43	2.48	2.69	2.72	2.75	2.88	2.92	2.94	2.90	4.13	4.56	4.41	3.04	3.11
1988	4.26	4.16	3.99	4.07	4.09	4.05	4.04	4.21	4.03	3.90	4.00	3.81	4.05	3.00
1989	3.80	3.61	3.68	3.54	3.58	3.53	3.69	3.89	4.07	4.29	4.44	4.14	3.75	2.80
1990	3.96	3.55	3.57	3.67	3.72	3.88	3.93	4.05	4.11	3.89	3.95	4.01	3.79	2.66
1991	4.10	3.93	3.94	3.99	4.07	4.20	4.30	4.29	4.20	4.22	4.15		4.07	2.75
Year	June	July 2/	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	Average 3/	Loan rate
Oats:														
	\$/bu.													
1983	1.51	1.46	1.45	1.55	1.62	1.67	1.73	1.81	1.88	1.81	1.82	1.84	1.62	1.36
1984	1.80	1.68	1.62	1.60	1.69	1.64	1.72	1.74	1.69	1.68	1.68	1.60	1.67	1.31
1985	1.59	1.31	1.16	1.10	1.08	1.17	1.20	1.18	1.16	1.14	1.13	1.21	1.23	1.31
1986	1.10	0.90	0.86	0.99	1.10	1.32	1.44	1.46	1.47	1.45	1.50	1.57	1.21	0.99
1987	1.52	1.29	1.40	1.49	1.60	1.62	1.76	1.79	1.84	1.78	1.82	1.84	1.56	0.94
1988	2.63	2.86	2.54	2.57	2.56	2.41	2.47	2.52	2.46	2.41	2.24	2.13	2.61	0.90
1989	1.82	1.53	1.47	1.38	1.47	1.48	1.53	1.47	1.43	1.39	1.44	1.45	1.49	0.85
1990	1.33	1.15	1.06	1.09	1.14	1.16	1.17	1.13	1.13	1.16	1.16	1.16	1.14	0.81
1991	1.08	1.08	1.09	1.12	1.21	1.24	1.25	1.27	1.44	1.44	1.46	1.41	1.20	0.83
1992	1.38	1.35											1.10-1.50	0.87
All barley:														
1983	2.32	2.20	2.34	2.46	2.53	2.55	2.55	2.55	2.47	2.50	2.54	2.78	2.47	2.16
1984	2.61	2.54	2.26	2.25	2.29	2.25	2.19	2.24	2.21	2.18	2.16	2.22	2.29	2.08
1985	2.14	2.08	1.98	1.88	1.96	2.05	2.07	2.05	1.95	1.88	1.85	1.73	1.98	2.08
1986	1.57	1.67	1.51	1.45	1.58	1.69	1.62	1.60	1.63	1.69	1.69	1.76	1.61	1.56
1987	1.74	1.82	2.00	1.87	1.72	1.88	1.83	1.78	1.72	1.65	1.74	1.77	1.81	1.49
1988	2.45	2.97	2.96	2.94	2.86	2.96	2.73	2.74	2.67	2.74	2.73	2.64	2.79	1.44
1989	2.34	2.16	2.70	2.47	2.41	2.47	2.47	2.33	2.33	2.19	2.22	2.36	2.42	1.34
1990	2.29	2.16	2.13	2.13	2.04	2.16	2.13	2.14	2.13	2.15	2.10	2.05	2.14	1.28
1991	1.90	1.73	2.06	2.05	2.10	2.20	2.24	2.21	2.18	2.09	2.09	2.06	2.10	1.32
1992	2.08	2.04											1.90-2.30	1.40
Year	June	July 2/	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May		
Feed barley:														
	\$/bu.													
1983	2.52	2.31	2.23	2.41	2.45	2.51	2.52	2.58	2.47	2.54	2.55	2.86		
1984	2.72	2.60	2.10	2.13	2.19	2.19	2.20	2.22	2.27	2.19	2.16	2.30		
1985	2.26	2.05	1.75	1.74	1.85	1.90	2.03	2.00	1.90	1.83	1.85	1.81		
1986	1.61	1.44	1.21	1.33	1.49	1.62	1.59	1.56	1.61	1.69	1.71	1.84		
1987	1.79	1.67	1.54	1.57	1.66	1.68	1.63	1.65	1.64	1.59	1.73	1.76		
1988	2.07	2.34	2.37	2.39	2.34	2.30	2.27	2.28	2.29	2.35	2.32	2.27		
1989	2.18	1.96	2.06	1.98	1.97	2.08	2.10	2.02	2.01	1.99	2.08	2.28		
1990	2.26	2.04	1.77	1.85	1.91	1.95	1.89	2.01	1.93	1.95	1.99	2.00		
1991	1.90	1.63	1.63	1.84	1.89	1.96	2.06	2.01	2.05	1.99	2.00	2.02		
1992	2.06	1.98												
Malting barley:														
1983	2.05	2.06	2.50	2.69	2.72	2.61	2.61	2.50	2.47	2.46	2.54	2.53		
1984	2.52	2.48	2.50	2.52	2.52	2.39	2.18	2.29	2.11	2.17	2.17	2.10		
1985	2.02	2.13	2.49	2.33	2.24	2.32	2.19	2.13	1.99	1.93	1.85	1.66		
1986	1.52	2.07	2.23	1.85	1.83	1.78	1.65	1.70	1.69	1.69	1.65	1.66		
1987	1.68	2.04	2.55	2.39	1.88	2.07	2.01	2.15	1.80	1.69	1.75	1.81		
1988	2.80	3.26	3.38	3.47	3.41	3.34	3.27	3.32	3.22	3.22	3.16	3.04		
1989	2.62	2.68	3.04	2.87	2.89	2.91	2.88	2.73	2.61	2.45	2.51	2.53		
1990	2.35	2.37	2.47	2.42	2.29	2.34	2.44	2.23	2.33	2.40	2.26	2.10		
1991	1.89	2.02	2.76	2.61	2.73	2.57	2.52	2.51	2.51	2.27	2.27	2.19		
1992	2.11	2.16												

1/ Prices do not include an allowance for loans outstanding and government purchases. 2/ July 1992 data are preliminary. 3/ U.S. season-average prices based on monthly prices weighted by monthly marketings.

Source: Agricultural Prices, Agricultural Statistics Board, USDA.

Appendix table 12--Cash prices at principal markets, 1985-92

Year	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Average
Corn, no. 2 yellow, Central Illinois: \$/bu.													
1985	2.28	2.10	2.32	2.38	2.36	2.33	2.29	2.31	2.42	2.41	1.93	1.52	2.22
1986	1.34	1.34	1.55	1.52	1.44	1.38	1.46	1.56	1.75	1.74	1.60	1.46	1.51
1987	1.50	1.64	1.74	1.78	1.84	1.90	1.92	1.92	1.97	2.66	2.85	2.70	2.03
1988	2.68	2.70	2.54	2.58	2.62	2.60	2.64	2.58	2.64	2.53	2.44	2.30	2.57
1989	2.35	2.25	2.29	2.29	2.29	2.34	2.44	2.64	2.73	2.70	2.68	2.54	2.46
1990	2.25	2.18	2.20	2.27	2.31	2.36	2.43	2.50	2.41	2.34	2.34	2.45	2.34
1991	2.41	2.41	2.42	2.41	2.50	2.57	2.64	2.49	2.52	2.52	2.41		
Corn, no. 2 yellow, Gulf Ports: \$/bu.													
1985	2.59	2.50	2.69	2.75	2.72	2.63	2.56	2.57	2.68	2.63	2.12	1.85	2.52
1986	1.68	1.66	1.83	1.81	1.73	1.70	1.83	1.89	2.06	2.06	1.95	1.81	1.83
1987	1.86	1.99	2.08	2.11	2.20	2.23	2.29	2.28	2.29	3.05	3.22	3.02	2.39
1988	3.08	3.07	2.89	2.99	3.01	2.99	3.02	2.93	2.99	2.87	2.73	2.57	2.93
1989	2.60	2.40	2.75	2.75	2.69	2.70	2.72	3.01	3.08	3.05	2.92	2.79	2.79
1990	2.59	2.55	2.54	2.60	2.68	2.70	2.77	2.80	2.69	2.65	2.67	2.79	2.67
1991	2.76	2.76	2.72	2.71	2.70	2.89	2.96	2.77	2.77	2.80	2.61		
Corn, no. 2 yellow, St. Louis: \$/bu.													
1985	2.38	2.27	2.50	2.59	2.55	2.50	2.42	2.46	2.56	2.52	2.01	1.67	2.37
1986	1.47	1.46	1.68	1.69	1.61	1.57	1.65	1.74	1.93	1.92	1.79	1.65	1.68
1987	1.65	1.78	1.91	1.97	2.05	2.07	2.09	2.10	2.13	2.77	2.96	2.81	2.19
1988	2.82	2.82	2.70	2.76	2.81	2.79	2.82	2.76	2.83	2.58	2.57	2.38	2.72
1989	2.38	2.39	2.48	2.44	2.45	2.48	2.57	2.77	2.86	2.85	2.75	2.59	2.58
1990	2.37	2.32	2.65	2.41	2.46	2.50	2.58	2.61	2.52	2.47	2.45	2.54	2.49
1991	2.44	2.46	2.50	2.53	2.51	2.73	2.78	2.59	2.63	2.61	2.32		
Sorghum, no. 2 yellow, Gulf Ports: 1/ \$/cwt.													
1985	3.70	3.97	4.34	4.52	4.45	4.30	4.28	4.50	4.80	3.90	3.37	2.71	4.07
1986	2.95	3.15	3.26	3.15	3.05	3.09	3.35	3.30	3.51	3.50	3.30	3.04	3.22
1987	3.13	3.35	3.55	3.50	3.65	3.80	3.86	3.70	3.73	5.00	5.33	4.93	3.96
1988	4.99	4.91	4.64	4.93	4.99	4.99	5.02	4.89	5.05	4.75	4.02	4.53	4.81
1989	4.67	4.61	4.69	4.70	4.62	4.59	4.70	4.97	5.04	4.87	4.95	4.73	4.76
1990	4.52	4.43	4.43	4.60	4.76	4.82	4.97	4.94	4.64	4.45	4.54	4.72	4.65
1991	4.81	4.86	5.95	4.90	4.80	5.30	5.39	5.00	4.89	4.72	4.27		
Sorghum, no. 2 yellow, Kansas City: \$/cwt.													
1985	3.56	3.62	3.75	3.97	3.95	3.80	3.82	4.00	4.25	4.00	3.20	2.71	3.72
1986	2.47	2.60	2.70	2.62	2.50	2.57	2.80	2.85	3.10	3.20	2.80	2.55	2.73
1987	2.64	2.75	2.90	2.95	3.05	3.24	3.27	3.16	3.21	4.58	4.79	4.28	3.40
1988	4.27	4.17	4.00	4.23	4.24	4.26	4.32	4.17	4.29	4.15	3.96	3.92	4.17
1989	4.73	3.91	4.00	3.98	3.91	3.84	4.01	4.32	4.47	4.54	4.48	4.27	4.21
1990	3.89	3.79	3.85	3.97	4.12	4.21	4.35	4.34	4.13	4.02	4.05	4.22	4.08
1991	4.24	4.30	4.27	4.35	4.44	4.62	4.78	4.41	4.54	4.51	4.05		
Sorghum, no. 2 yellow, Texas High Plains: 2/ \$/cwt.													
1985	4.19	4.38	4.30	4.49	4.47	4.36	4.33	4.48	4.77	4.84	3.93	3.36	4.32
1986	3.35	3.24	2.97	3.06	2.94	2.89	3.06	3.32	3.56	3.60	3.58	3.30	3.24
1987	3.19	3.27	3.27	3.39	3.40	3.53	3.56	3.54	3.55	4.84	5.25	4.96	3.81
1988	4.98	4.95	4.62	4.63	4.75	4.69	4.72	4.63	4.50	4.59	4.46	4.44	4.66
1989	4.39	4.13	4.06	4.03	4.04	4.02	4.10	4.38	4.96	4.94	4.82	4.63	4.38
1990	4.27	4.17	4.28	4.49	4.49	4.57	4.69	4.66	4.66	4.48	4.39	4.57	4.48
1991	4.52	4.56	4.57	4.61	4.76	4.92	5.04	4.93	5.01	5.03	4.85		
Year	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	Average
Barley, no. 3 or better malting, 65% or better plump, Minneapolis: \$/bu.													
1985	2.46	2.25	2.03	2.15	2.10	2.27	2.29	2.28	2.20	2.34	2.40	2.07	2.24
1986	1.84	1.75	1.61	1.76	1.93	2.02	1.88	1.81	1.92	2.01	2.05	2.12	1.89
1987	2.07	1.93	1.73	1.98	2.08	2.05	2.01	2.02	2.15	2.08	2.11	2.24	2.04
1988	3.61	3.87	4.25	4.40	4.39	4.14	3.82	4.14	4.19	4.33	4.29	3.84	4.11
1989	3.02	3.33	3.57	3.43	3.48	3.18	3.19	3.20	3.02	3.83	2.97	3.17	3.28
1990	2.92	2.35	2.35	2.32	2.30	2.40	2.31	2.33	2.38	2.46	2.48	2.41	2.42
1991	2.26	2.14	2.14	2.21	2.38	2.50	2.54	2.51	2.51	2.50	2.50	NQ	2.38
1992	3.95	2.59											
Barley, no. 2 feed, Minneapolis: 3/, 4/ \$/bu.													
1985	1.90	1.66	1.46	1.40	1.41	1.49	1.60	1.57	NQ	NQ	NQ	1.31	1.53
1986	1.23	1.16	1.13	1.27	1.50	1.63	1.23	NQ	NQ	1.64	1.76	1.86	1.44
1987	1.73	1.59	1.60	1.76	1.78	1.82	1.74	1.72	1.77	1.88	1.94	1.98	1.78
1988	2.41	2.38	2.08	2.24	2.32	2.27	2.14	2.24	2.33	2.49	2.52	2.41	2.32
1989	2.12	2.11	2.17	2.13	2.16	2.15	2.23	2.28	2.20	2.27	2.27	2.33	2.20
1990	2.39	2.17	1.99	2.01	2.11	2.16	2.07	2.09	2.15	2.14	2.12	2.13	2.13
1991	2.02	1.89	1.92	2.08	2.18	2.23	2.18	2.20	2.28	2.30	2.35	2.38	2.17
1992	2.30	2.15											
Oats, no. 2 heavy white, Minneapolis: \$/bu.													
1985	1.59	1.44	1.23	1.24	1.19	1.32	1.39	1.37	1.30	1.27	1.16	1.22	1.31
1986	1.18	1.05	1.12	1.29	1.39	1.72	1.66	1.64	1.56	1.46	1.59	1.83	1.46
1987	1.64	1.61	1.77	1.85	1.97	2.05	2.02	2.10	2.06	1.93	1.94	2.12	1.92
1988	3.26	3.25	3.09	3.07	2.99	2.71	2.74	2.87	2.59	2.49	2.30	2.22	2.80
1989	1.97	1.72	1.59	1.58	1.61	1.68	1.70	1.56	1.48	1.57	1.63	1.68	1.65
1990	1.52	1.37	1.25	1.23	1.29	1.30	1.24	1.22	1.18	1.27	1.32	1.36	1.30
1991	1.25	1.33	1.38	1.35	1.41	1.42	1.49	1.50	1.68	1.66	1.57	1.59	1.47
1992	1.55	1.49											

NQ = No quotes.

1/ Rail delivered to Texas Gulf. 2/ Reporting point changed from Texas High Plains to South Panhandle starting January 1991. 3/ Prior to June 1977 reported as barley no. 3 or better. 4/ Reporting point changed from Minneapolis #2 feed to Duluth #2 feed beginning March 1987.

Source: Grain and Feed Market News, Agricultural Marketing Service, USDA.

Appendix table 13--Feed-price ratios for livestock, poultry, and milk, by months, 1983-92

Year	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July 1/	Aug.	Average
Hog/corn, U.S. basis 2/:													
1983	13.30	12.80	11.80	14.00	15.40	14.60	14.30	14.30	14.10	14.60	15.80	16.20	14.27
1984	16.00	16.50	18.40	19.00	18.20	18.40	16.30	15.30	15.40	16.90	17.60	17.40	17.12
1985	17.30	20.40	19.50	19.80	19.00	18.40	17.60	17.30	19.20	22.70	29.50	35.90	21.38
1986	40.20	37.90	35.90	33.70	31.90	33.90	32.20	33.40	32.80	35.00	37.30	39.90	35.34
1987	36.40	31.50	25.20	23.40	24.30	25.00	22.70	22.30	23.90	19.50	16.20	16.90	23.94
1988	15.70	15.00	14.40	15.70	15.70	15.60	15.10	14.40	16.10	17.90	18.60	20.10	16.19
1989	19.00	21.00	20.10	21.20	20.50	20.80	21.60	21.40	23.40	22.90	23.20	23.30	21.53
1990	23.30	23.30	25.90	21.50	22.00	22.50	21.50	21.00	22.70	23.70	23.90	22.00	22.78
1991	19.90	18.90	16.60	16.60	15.20	16.10	15.60	16.40	18.20	18.80	18.90		
Beef-steer/corn, Omaha 3/:													
1983	17.80	18.40	18.30	19.80	21.60	22.10	21.10	20.40	19.70	19.10	20.40	20.70	19.95
1984	21.30	22.40	24.60	25.60	24.80	24.10	22.20	21.50	21.50	21.00	20.40	21.70	22.59
1985	21.80	25.70	27.80	26.70	25.60	24.40	24.00	22.90	23.00	22.30	28.90	36.70	25.82
1986	42.10	42.70	39.70	38.80	40.80	43.90	41.90	42.20	40.20	38.90	41.40	43.90	41.38
1987	42.10	41.40	38.40	36.70	36.40	37.40	38.20	39.40	38.60	29.50	24.40	26.10	35.72
1988	26.40	26.40	28.40	27.90	28.10	28.70	29.40	30.20	29.30	29.10	29.60	32.00	28.79
1989	30.80	31.10	32.20	32.80	34.20	34.00	32.60	31.10	29.30	27.90	28.50	30.90	31.28
1990	34.50	36.50	37.30	36.50	35.30	34.30	34.00	32.80	32.70	32.00	31.30	28.50	33.81
1991	28.80	29.90	30.50	29.70	29.90	31.00	30.40	31.60	30.60	29.40	32.20		
Milk/feed, U.S. basis 4/:													
1983	1.36	1.39	1.36	1.34	1.33	1.33	1.34	1.32	1.32	1.32	1.35	1.40	1.35
1984	1.48	1.56	1.62	1.59	1.57	1.57	1.55	1.51	1.47	1.45	1.44	1.47	1.52
1985	1.51	1.56	1.55	1.53	1.48	1.50	1.48	1.48	1.46	1.45	1.51	1.55	1.51
1986	1.61	1.75	1.77	1.77	1.73	1.69	1.63	1.61	1.57	1.57	1.56	1.58	1.65
1987	1.64	1.65	1.65	1.63	1.51	1.47	1.43	1.40	1.37	1.36	1.15	1.19	1.45
1988	1.26	1.32	1.36	1.38	1.38	1.35	1.30	1.29	1.28	1.29	1.37	1.43	1.33
1989	1.52	1.63	1.71	1.76	1.67	1.56	1.49	1.48	1.49	1.52	1.55	1.58	1.58
1990	1.54	1.45	1.40	1.29	1.31	1.28	1.27	1.27	1.27	1.28	1.37	1.43	1.35
1991	1.49	1.53	1.57	1.57	1.51	1.44	1.40	1.40	1.43	1.47	1.51		
Egg/feed, U.S. basis 5/:													
1983	6.00	6.20	6.90	7.70	8.80	8.50	7.40	8.50	6.50	5.80	5.80	5.80	6.99
1984	5.90	5.70	6.50	6.30	5.50	5.60	6.30	5.70	5.50	5.90	5.90	6.50	5.94
1985	7.10	7.30	7.50	7.40	7.20	6.90	7.60	6.40	6.40	5.70	6.90	7.30	6.98
1986	7.30	7.00	8.00	7.80	7.30	7.10	6.60	6.60	5.90	6.00	5.70	5.60	6.74
1987	6.50	6.00	6.40	5.70	5.50	5.30	5.60	5.20	5.00	5.30	4.90	4.90	5.53
1988	5.40	5.30	5.40	5.40	5.90	5.80	7.50	6.20	5.90	6.00	6.10	6.80	5.98
1989	6.80	7.10	7.90	8.30	8.40	7.10	8.00	7.30	6.20	6.40	5.40	6.40	7.11
1990	6.70	7.30	7.30	7.70	7.90	6.90	7.80	6.80	6.10	6.10	6.80	6.70	7.01
1991	6.50	6.20	6.30	7.20	5.80	5.40	5.40	5.50	5.20	5.30	5.20		
Broiler/feed, U.S. basis 6/:													
1983	2.70	2.50	2.80	2.90	3.10	3.10	3.10	2.70	2.70	2.70	3.00	2.70	2.83
1984	2.80	2.60	2.80	2.70	2.90	2.90	2.80	2.80	3.10	3.20	3.10	3.10	2.90
1985	3.20	3.10	3.50	3.20	3.20	3.10	3.10	3.10	3.40	3.80	4.50	4.60	3.48
1986	3.80	4.40	3.90	3.40	3.60	3.50	3.30	3.20	3.30	3.00	2.90	3.30	3.47
1987	2.90	2.60	2.70	2.50	2.70	2.70	2.80	3.10	3.70	4.10	3.40	3.40	3.05
1988	3.20	2.80	2.70	2.80	2.80	2.80	3.10	3.30	3.70	3.50	3.30	3.00	3.08
1989	3.10	2.70	2.60	2.50	2.70	3.00	3.20	3.00	3.20	3.10	3.30	3.00	2.95
1990	3.10	2.70	2.70	2.70	2.90	2.90	2.90	2.90	3.00	3.00	3.20	3.20	2.93
1991	3.20	3.00	2.80	2.80	2.90	2.90	2.90	2.80	3.00	3.00	3.20		
Turkey/feed, U.S. basis 7/:													
1983	3.00	3.00	3.10	3.50	3.60	3.20	3.30	3.30	3.30	3.30	3.60	3.80	3.33
1984	3.90	4.40	5.00	5.50	4.70	3.80	3.70	3.70	3.70	3.90	4.20	4.50	4.25
1985	5.00	5.50	5.50	5.50	3.40	3.40	3.50	3.50	3.80	4.30	4.50	4.60	4.38
1986	4.70	4.90	4.80	4.00	3.30	3.40	3.40	3.50	3.40	3.30	3.10	3.00	3.73
1987	2.90	2.80	3.10	3.60	2.90	2.60	2.50	2.70	2.80	3.00	3.00	3.10	2.92
1988	3.40	3.60	3.60	2.90	2.70	2.90	3.10	3.30	3.50	3.50	3.30	3.30	3.26
1989	3.00	3.20	3.40	3.30	3.00	2.80	3.10	3.10	3.20	3.20	3.30	3.30	3.16
1990	3.40	3.60	3.60	3.10	2.90	3.00	3.10	3.20	3.20	3.30	3.40	3.50	3.28
1991	3.50	3.10	3.10	3.20	3.10	3.00	3.10	3.10	3.10	3.10	3.10		

1/ July 1992 data are preliminary. 2/ Bushels of corn equal in value to 100 pounds of hog, live weight. 3/ Based on price of choice beef-steers, 900-1100 pounds. 4/ Pounds of 16-percent mixed dairy feed equal in value to 1 pound whole milk. 5/ Pounds of laying feed equal in value to 1 dozen eggs. 6/ Pounds of broiler grower feed equal in value to 1 pound broiler, live weight. 7/ Pounds of turkey grower feed equal in value to 1 pound of turkey, live weight.

Sources: Agricultural Prices, Agricultural Statistics Board, USDA.
Livestock, Meat & Wool Market News, Agricultural Marketing Service, USDA.

Appendix table 14--Price trends, selected feeds, and corn products

Item	Unit	Sept.-Aug. 1990/91 1/	1992						
			Jan.	Feb.	Mar.	Apr.	May	June	July
Wholesale, mostly bulk 2/:									
Soybean meal, 44% solvent, Decatur	\$/ton	168.60	172.70	174.30	174.20	174.80	182.75	181.70	173.90
Soybean meal, high protein, Decatur	"	180.19	184.00	185.40	185.90	187.20	195.25	203.90	186.25
Cottonseed meal, 41% solvent, Memphis	"	134.57	156.25	143.10	124.25	121.25	127.50	132.50	133.75
Linseed meal, 34% solvent, Minneapolis	"	129.54	122.00	124.00	115.00	117.50	120.00	125.00	123.50
Meat and bone meal, Kansas City 3/	"	204.20	208.90	205.90	215.70	202.25	206.50	206.20	197.10
Fishmeal, 67% protein, East Coast	"	311.62	394.40	390.60	NQ	348.00	364.20	365.80	345.00
Corn gluten feed, Illinois pts.	"	97.94	107.40	108.50	101.50	95.50	95.40	94.40	99.40
Corn gluten meal, 60% protein, Illinois pts.	"	237.68	267.50	275.60	272.00	247.50	246.25	248.50	243.75
Brewers' dried grains, Milwaukee	"	93.46	121.90	122.50	108.50	87.75	90.00	90.00	94.40
Distillers' dried grains, Lawrenceburg, Indiana	"	116.18	128.00	127.60	124.10	121.00	117.25	117.20	126.00
Feather meal, Arkansas pts.	"	194.72	221.40	209.75	226.00	198.10	191.25	195.20	192.50
Wheat bran, Kansas City	"	66.78	76.90	78.40	77.40	60.10	59.10	62.10	60.25
Wheat middlings, Kansas City	"	66.75	76.90	78.40	77.40	60.10	59.10	62.10	60.25
Rice bran, f.o.b. mills, Arkansas	"	61.68	77.50	60.50	52.70	52.60	50.10	51.90	56.75
Hominy feed, Illinois pts.	"	81.37	88.00	93.60	91.70	92.75	84.50	83.90	83.25
Alfalfa meal, dehydrated, Kansas City	"	110.26	104.00	104.00	102.60	101.75	98.75	98.00	97.75
Cane molasses, New Orleans	"	68.47	65.00	65.00	65.00	65.00	63.75	62.50	62.50
Molasses beet pulp, Los Angeles 4/	"	105.99	113.10	115.00	121.40	123.00	110.00	112.60	NQ
Animal fat, Kansas City 5/	c/lb.	10.64	10.00	10.00	10.00	10.30	10.20	NQ	NQ
Urea, 42% nitrogen, Forth Worth	\$/ton	189.53	180.00	180.00	180.00	180.00	180.00	190.00	190.00
Corn, no. 2 white, Kansas City	\$/bu.	2.98	2.66	2.73	3.30	3.54	3.55	3.60	3.54
Prices paid, U.S. basis 6/ 7/:									
Soybean meal, 44%	\$/cwt	12.75	13.00	---	---	13.00	---	---	13.20
Cottonseed meal, 41%	"	14.33	14.00	---	---	13.80	---	---	13.90
Wheat bran	"	10.70	10.90	---	---	10.80	---	---	10.80
Wheat middlings	"	9.28	9.38	---	---	9.15	---	---	8.99
Broiler grower feed	\$/ton	208.00	205.00	---	---	212.00	---	---	211.00
Laying feed	"	195.25	202.00	---	---	200.00	---	---	201.00
Turkey grower feed	"	234.00	239.00	---	---	239.00	---	---	244.00
Chick starter	"	218.00	227.00	---	---	228.00	---	---	228.00
Dairy feed, 16%	"	177.50	179.00	---	---	179.00	---	---	178.00
Beef cattle concentrate, 32-36% protein 8/	"	248.50	250.00	---	---	249.00	---	---	250.00
Hog concentrate, 38-42% protein 8/	"	297.00	301.00	---	---	304.00	---	---	302.00
Stock salt 8/	50 lb	3.57	3.57	---	---	3.60	---	---	3.63
Corn products, wholesale 9/:									
Corn meal, yellow, New York	\$/cwt	13.46	13.42	13.75	13.77	13.51	13.56	13.84	13.48
Grits (brewers'), Chicago	"	9.98	9.91	10.07	10.06	9.85	9.90	10.18	9.82
Syrup, Midwest/West	c/lb.	11.60	13.23	13.23	13.23	13.23	13.23	13.23	13.23
Sugar (dextrose), Midwest	"	24.50	24.50	24.50	24.50	24.50	24.50	24.50	24.50
High-fructose (dried weight in tank cars), Midwest	"	14.46	14.70	14.70	14.70	14.70	14.70	14.70	16.61
Corn starch, f.o.b. Midwest	\$/cwt	11.02	10.38	10.62	10.92	11.22	11.22	11.22	11.32

--- = Not applicable.

NQ = No quotes.

1/ Preliminary. 2/ Grain and Feed Market News, Agricultural Marketing Service, USDA, except urea which is from Feedstuffs, Miller Publishing Co., Minneapolis, Minnesota. 3/ Reported as Central U.S. starting December 1991. 4/ Reported as N. California & Central Areas starting November 1991. 5/ Reported as Central U.S. starting November 1991. 6/ Agricultural Prices, Agricultural Statistics Board, USDA. 7/ Prices paid data are available on a quarterly basis only. 8/ Prices previously published in cwt. 9/ Milling and Baking News, Kansas City, Missouri, except starch which is from industry sources.

Appendix table 15--Corn, sorghum, barley, and oats exports, 1989/90 to date 1/

Year and month	Corn		Sorghum	Year and month	Barley		Oats	
	Grain only	Total			Grain only	Total	Grain only	Total
	Bushels				Bushels			
1989/90:				1989/90:				
Sept.	113,776,974	116,262,446	33,760,439	June	7,364,654	8,121,974	73,555	134,619
Oct.	174,741,911	176,889,510	33,729,330	July	9,666,205	10,690,552	99,550	154,363
Nov.	293,764,931	295,404,921	22,408,040	Aug.	9,505,299	9,979,181	56,400	181,747
1st Qtr.	582,283,816	588,556,877	89,897,809	1st Qtr.	26,536,158	28,791,707	229,505	470,729
Dec.	258,806,792	260,503,952	19,612,697	Sept.	8,060,139	9,274,483	137,368	245,862
Jan.	239,115,226	241,192,419	33,378,612	Oct.	4,634,063	5,354,195	86,668	183,382
Feb.	183,848,814	186,700,452	28,182,429	Nov.	4,520,961	5,397,789	46,922	103,742
2nd Qtr.	681,770,832	688,396,823	81,173,738	2nd Qtr.	17,215,163	20,026,467	270,958	533,186
Mar.	193,492,324	197,237,589	31,489,112	Dec.	9,910,349	10,568,654	55,999	83,079
Apr.	193,837,384	199,184,789	27,623,273	Jan.	6,037,587	6,879,444	59,397	93,083
May	213,255,189	216,452,118	22,230,949	Feb.	6,786,606	6,980,134	36,769	65,525
3rd Qtr.	600,584,897	612,874,496	81,343,334	3rd Qtr.	22,734,542	24,428,232	152,165	241,687
June	201,188,588	204,549,989	12,501,897	Mar.	566,367	800,696	66,607	102,001
July	148,720,325	152,418,589	14,517,610	Apr.	8,154,546	9,663,627	72,009	110,947
Aug.	153,686,452	158,203,805	23,760,673	May	8,829,623	9,018,289	32,389	63,663
4th Qtr.	503,595,365	515,172,383	50,780,180	4th Qtr.	17,550,536	19,482,612	171,005	276,611
Total	2,368,234,910	2,405,000,579	303,195,061	Total	84,036,399	92,729,018	823,633	1,522,213
1990/91:				1990/91:				
Sept.	104,481,834	107,660,895	18,212,586	June	11,117,511	11,513,895	97,249	1,570,662
Oct.	108,167,144	111,681,798	17,699,762	July	9,710,672	10,087,071	40,805	85,623
Nov.	168,266,952	171,969,136	20,675,429	Aug.	10,034,339	10,539,636	44,949	110,455
1st Qtr.	380,915,930	391,311,829	56,587,777	1st Qtr.	30,862,522	32,140,602	183,003	1,766,740
Dec.	142,014,881	144,624,784	17,623,359	Sept.	1,988,455	3,087,526	126,235	169,601
Jan.	145,445,877	149,685,134	16,949,648	Oct.	14,051,751	14,502,064	60,209	128,694
Feb.	183,222,907	188,180,259	26,673,327	Nov.	9,145,558	9,384,744	44,661	114,089
2nd Qtr.	470,683,665	482,490,177	61,246,334	2nd Qtr.	25,185,764	26,974,334	231,105	412,384
Mar.	188,842,553	192,831,719	29,896,631	Dec.	12,191,302	13,434,045	16,252	72,260
Apr.	144,273,052	146,807,504	29,567,298	Jan.	5,306,015	5,997,143	56,190	123,333
May	120,483,217	125,189,783	16,533,100	Feb.	1,110,671	1,517,807	21,888	87,294
3rd Qtr.	453,598,822	464,829,006	75,997,029	3rd Qtr.	18,607,988	20,948,995	94,330	282,887
June	105,294,851	108,118,121	4,063,117	Mar.	2,768,573	3,627,178	23,680	2,293,261
July	163,730,027	169,515,240	14,562,929	Apr.	438,667	1,083,195	40,473	183,233
Aug.	150,394,445	153,879,355	19,554,532	May	2,764,060	4,068,384	38,181	136,823
4th Qtr.	419,419,323	431,512,716	38,180,578	4th Qtr.	5,971,300	8,778,757	102,334	2,613,317
Total	1,724,617,740	1,770,143,728	232,011,718	Total	80,627,574	88,842,688	610,772	5,075,328
1991/92:				1991/92:				
Sept.	134,579,575	137,427,301	14,660,649	June	695,827	1,328,726	58,438	121,591
Oct.	136,956,495	140,060,285	16,459,810	July	5,394,267	6,485,164	53,051	149,437
Nov.	149,537,460	152,976,206	15,121,241	Aug.	7,408,530	8,107,336	22,994	99,641
1st Qtr.	421,073,530	430,463,792	46,241,700	1st Qtr.	13,498,624	15,921,226	134,483	370,669
Dec.	127,343,892	130,025,266	30,157,833	Sept.	8,692,162	9,507,942	84,580	170,240
Jan.	100,189,249	102,917,540	35,198,141	Oct.	13,090,478	13,776,414	96,669	202,510
Feb.	134,155,436	136,462,241	42,850,982	Nov.	14,911,334	15,448,915	19,701	177,374
2nd Qtr.	361,688,577	369,405,047	108,206,956	2nd Qtr.	36,693,974	38,733,271	200,950	550,124
Mar.	124,300,247	126,979,997	34,571,072	Dec.	7,929,995	8,234,726	20,883	242,721
Apr.	142,446,226	145,122,719	45,425,727	Jan.	11,515,981	11,782,314	109,956	371,445
May	104,711,888	107,538,905	25,007,215	Feb.	5,187,016	5,698,245	48,226	202,737
3rd Qtr.	371,458,361	379,641,621	105,004,014	3rd Qtr.	24,632,992	25,715,285	179,065	816,903
June	147,780,588	150,657,616	8,305,140	Mar.	1,686,720	2,130,608	320,910	651,232
July				Apr.	11,396,426	12,749,187	673,168	813,441
Aug.				May	6,636,142	7,546,220	394,834	523,435
4th Qtr.				4th Qtr.	19,719,288	22,426,015	1,388,912	1,988,108
Total				Total	94,544,878	102,795,797	1,903,410	3,725,804
1992/93:				1992/93:				
Sept.				June	6,112,452	7,571,349	337,169	451,272

1/ Total corn exports include grain only (white, yellow, seed, relief), dry process (cornmeal for relief, as grain, grits), and wet process (corn starch, sugar dextrose, glucose, high fructose). Sorghum includes seed and unmilled. Barley includes grain only (grain for malting purposes, other) and barley malt. Oats include grain and oatmeal (bulk and packaged).

Source: Bureau of the Census, U.S. Department of Commerce.

Appendix table 16--Corn, sorghum, barley, and oats imports, 1989/90 to date 1/

Year and month	Corn		Sorghum	Year and month	Barley		Oats	
	Grain only	Total			Grain only	Total	Grain only	Total
Bushels				Bushels				
1989/90:				1989/90:				
Sept.	38,078	278,865	0	June	1,649,125	1,745,195	3,146,832	3,789,238
Oct.	307,119	553,242	0	July	571,185	661,468	6,440,929	6,730,677
Nov.	297,019	545,010	0	Aug.	1,356,499	1,456,086	7,372,277	7,823,880
1st Qtr.	642,216	1,377,117	0	1st Qtr.	3,576,809	3,862,749	16,960,038	18,343,795
Dec.	98,067	284,277	0	Sept.	263,515	360,996	5,871,691	6,236,194
Jan.	247,828	427,823	0	Oct.	204,334	283,661	4,460,867	4,779,170
Feb.	92,762	248,372	0	Nov.	1,517,596	1,674,049	7,146,334	7,452,067
2nd Qtr.	438,657	960,472	0	2nd Qtr.	1,985,445	2,318,706	17,478,892	18,467,431
Mar.	182,222	320,108	74,979	Dec.	1,078,994	1,235,670	6,581,569	6,720,624
Apr.	162,070	340,157	826	Jan.	823,514	951,248	4,913,766	5,106,965
May	275,032	540,454	42,236	Feb.	1,396,468	1,556,020	4,198,091	4,343,606
3rd Qtr.	619,324	1,200,719	118,041	3rd Qtr.	3,298,976	3,742,938	15,693,426	16,171,195
June	33,491	302,083	23,864	Mar.	1,412,265	1,513,301	3,990,978	4,077,241
July	135,597	409,747	75,398	Apr.	1,334,094	1,417,915	8,952,473	9,062,028
Aug.	32,720	259,866	8,410	May	1,468,016	1,585,615	3,318,168	3,416,949
4th Qtr.	201,808	971,696	107,672	4th Qtr.	4,214,375	4,516,831	16,261,619	16,556,218
Total	1,902,005	4,510,004	225,713	Total	13,075,605	14,441,224	66,393,975	69,538,639
1990/91:				1990/91:				
Sept.	29,118	260,345	5,551	June	603,392	691,725	6,675,002	6,765,949
Oct.	172,220	496,429	0	July	309,116	547,246	5,841,095	5,908,297
Nov.	683,889	920,644	60	Aug.	117,460	357,140	4,998,128	5,090,596
1st Qtr.	885,227	1,677,418	5,611	1st Qtr.	1,029,968	1,596,111	17,514,225	17,764,842
Dec.	90,489	263,269	0	Sept.	117,510	200,053	2,240,242	2,358,192
Jan.	100,811	305,895	0	Oct.	293,888	485,842	4,464,765	4,636,594
Feb.	83,751	264,812	0	Nov.	839,596	1,014,701	4,970,147	5,078,353
2nd Qtr.	275,051	833,976	0	2nd Qtr.	1,250,994	1,700,596	11,675,154	12,073,139
Mar.	80,937	251,187	60,462	Dec.	1,288,510	1,569,406	6,027,832	6,118,041
Apr.	214,595	370,354	167	Jan.	1,194,977	1,306,682	2,543,485	2,642,746
May	487,548	647,502	12	Feb.	1,723,635	1,836,340	9,675,744	9,822,449
3rd Qtr.	783,080	1,269,043	60,641	3rd Qtr.	4,207,122	4,712,428	18,247,061	18,583,236
June	155,046	327,612	0	Mar.	2,248,034	2,423,555	4,618,596	4,763,254
July	423,345	640,317	679	Apr.	3,369,631	3,401,987	3,767,262	3,887,601
Aug.	893,816	1,121,419	1,319	May	1,373,891	1,581,999	7,585,984	7,719,294
4th Qtr.	1,472,207	2,089,348	1,998	4th Qtr.	6,991,556	7,407,541	15,971,842	16,370,149
Total	3,415,565	5,869,785	68,250	Total	13,479,640	15,416,676	63,408,282	64,791,366
1991/92:				1991/92:				
Sept.	1,100,354	1,359,676	0	June	4,575,522	4,778,394	5,759,634	5,844,622
Oct.	2,251,767	2,514,541	0	July	1,743,996	1,919,668	7,175,340	7,240,484
Nov.	3,128,935	3,371,434	0	Aug.	1,120,846	1,279,512	8,780,737	8,871,528
1st Qtr.	6,481,056	7,245,651	0	1st Qtr.	7,440,364	7,977,574	21,715,711	21,956,634
Dec.	1,420,521	1,674,963	118	Sept.	567,099	652,111	4,958,443	5,041,886
Jan.	1,404,407	1,669,121	0	Oct.	1,232,489	1,313,834	9,129,115	9,219,462
Feb.	1,579,933	1,838,699	0	Nov.	1,657,843	1,741,481	3,209,866	3,325,064
2nd Qtr.	4,404,861	5,182,783	118	2nd Qtr.	3,457,431	3,707,426	17,297,424	17,586,412
Mar.	1,962,895	2,244,150	393	Dec.	1,818,152	2,009,904	4,236,846	4,411,775
Apr.	2,193,891	2,417,748	0	Jan.	2,349,600	2,483,012	5,997,604	6,120,696
May	1,247,071	1,460,385	225	Feb.	2,286,473	2,460,709	7,414,705	7,525,443
3rd Qtr.	5,403,857	6,122,283	618	3rd Qtr.	6,454,225	6,953,625	17,649,155	18,057,914
June	1,380,817	1,652,804	4,565	Mar.	2,525,374	2,676,242	6,625,725	6,729,380
July				Apr.	2,288,155	2,422,134	8,797,008	8,894,410
Aug.				May	2,356,369	2,453,301	2,679,647	2,788,631
4th Qtr.				4th Qtr.	7,169,898	7,551,677	18,102,380	18,412,421
Total				Total	24,521,918	26,190,302	74,764,670	76,013,381
1992/93:				1992/93				
Sept.				June	2,159,260	2,236,320	7,323,161	7,515,000

1/ Corn includes grain only (yellow dent corn, other), seed, and cornmeal. Sorghum is grain only. Barley includes grain only barley for malting, other), pearl barley, milled and malting. Oats include grain (hulled or unhulled), unhulled oats fit and unfit for human consumption, and oatmeal fit for human consumption.

Source: Bureau of the Census, U.S. Department of Commerce.

Appendix table 17--Shipments of grain on the Illinois Waterway and the Mississippi River (Locks 11-22), 1981/82-1991/92

Crop year	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Average
1981/82	3.4	3.4	4.6	3.9	1.2	0.8	2.1	4.1	3.8	4.4	3.9	5.0	3.4
1982/83	4.1	3.2	4.2	3.2	2.7	2.3	3.8	3.3	3.9	4.2	4.2	4.8	3.6
1983/84	5.3	4.9	5.7	4.4	1.0	3.6	4.5	5.3	4.4	3.7	3.4	3.3	4.1
1984/85	3.1	4.6	5.5	3.1	2.0	0.9	3.1	4.1	3.1	3.2	3.4	3.0	3.3
1985/86	2.4	2.6	4.3	3.3	1.8	1.7	3.6	3.4	3.6	3.2	2.5	3.3	2.9
1986/87	3.2	3.1	5.2	2.4	1.2	1.7	3.6	3.8	4.0	3.8	2.8	3.5	3.2
1987/88	3.3	3.8	3.9	2.9	1.9	2.0	3.0	4.2	4.3	3.6	3.7	3.3	3.3
1988/89	3.3	3.3	3.9	3.5	1.7	1.5	2.6	3.5	4.3	4.1	3.9	3.3	3.3
1989/90	3.0	3.9	4.7	2.5	2.2	2.2	3.5	4.5	5.2	4.5	5.0	4.0	3.8
1990/91	3.6	3.4	4.8	2.1	1.6	2.0	3.1	4.0	3.7	3.6	4.4	3.8	3.4
1991/92	3.3	3.5	3.7	2.9	1.8	2.0	3.4	3.8	4.1	4.1	4.8		3.3

Source: Mississippi River Barge Traffic, U.S. Army Corps of Engineers, Rock Island District.

Appendix table 18--Barge rates for grain shipments to New Orleans, Louisiana 1/

Crop year	Origin	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Average
1984/85	Peoria, IL St Louis, MO	7.77 5.94	8.07 5.92	6.71 5.15	5.79 3.98	7.34 4.36	6.87 4.20	5.73 3.88	5.08 3.79	4.33 3.29	4.76 3.39	4.83 3.34	4.63 3.64	5.99 4.24
1985/86	Peoria, IL St Louis, MO	5.26 4.32	7.93 6.42	6.48 4.80	9.08 5.35	7.22 4.39	5.64 3.87	4.28 3.18	4.13 3.14	3.90 2.97	3.70 2.99	3.70 2.96	6.21 4.62	5.63 4.08
1986/87	Peoria, IL St Louis, MO	8.37 6.52	10.54 7.52	6.64 5.06	5.16 3.62	4.95 3.28	5.23 3.52	6.96 5.27	5.88 4.54	5.44 3.77	6.16 4.30	6.15 4.37	6.46 4.99	6.50 4.73
1987/88	Peoria, IL St Louis, MO	8.66 6.58	9.04 6.97	7.38 5.73	5.68 4.29	7.32 4.39	6.89 4.59	8.16 6.13	7.25 5.47	6.19 4.65	9.86 7.56	9.79 6.81	7.61 6.46	7.82 5.80
1988/89	Peoria, IL St Louis, MO	9.80 7.91	10.32 8.35	7.88 5.94	8.81 6.11	7.32 5.19	7.26 5.31	7.08 5.40	5.85 4.18	5.34 3.72	6.13 4.44	4.92 3.68	5.13 3.92	7.15 5.35
1989/90	Peoria, IL St Louis, MO	5.89 4.64	10.49 7.90	10.87 6.84	12.15 7.05	9.13 5.23	7.32 5.07	6.43 4.92	7.70 5.64	6.43 4.82	5.47 3.99	4.56 3.22	5.40 3.96	7.65 5.27
1990/91	Peoria, IL St Louis, MO	6.33 4.76	7.38 5.57	7.16 5.62	5.97 4.21	7.46 4.89	6.45 4.20	5.09 3.91	5.28 3.88	4.85 3.44	5.62 4.11	6.65 4.90	7.98 6.24	6.35 4.65
1991/92	Peoria, IL St Louis, MO	10.87 8.22	10.67 8.43	6.86 5.09	6.33 4.39	5.57 4.39	6.31 4.52	6.67 5.07	5.76 4.23	5.05 3.52	5.55 4.06	5.83 4.05	6.26 4.19	6.79 4.96

1/ Assumes all traffic on the Illinois River originates at Peoria.

Source: Based on rates reported by Transportation Situation, Illinois Dept. of Agriculture.

Appendix table 19--Weekly average of rail car loadings of grain and soybeans, 1979/80-1991/92

Year	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Average
Carloads													
1979/80	28,576	32,118	32,558	30,500	30,504	31,025	30,170	26,546	23,606	28,333	32,584	32,921	29,953
1980/81	32,127	24,114	31,450	28,106	34,396	31,108	27,657	23,490	21,291	28,014	22,162	26,152	27,506
1981/82	25,607	25,609	27,419	22,384	22,967	27,220	26,813	25,798	23,755	22,540	27,020	25,123	25,188
1982/83	20,321	29,523	25,350	21,888	24,700	26,318	26,807	21,243	20,849	21,393	27,942	27,461	24,483
1983/84	29,735	31,414	29,515	25,927	31,068	29,105	27,666	26,784	23,616	24,335	26,632	29,848	27,970
1984/85	29,162	24,482	28,567	25,441	25,310	23,688	23,340	20,164	17,715	24,724	22,662	20,218	23,791
1985/86	18,889	26,227	28,214	23,482	25,424	22,558	20,648	17,743	17,673	24,907	24,426	24,342	22,878
1986/87	27,329	33,605	29,877	24,827	23,086	26,663	27,134	25,046	26,189	32,154	32,257	30,825	28,249
1987/88	32,977	32,820	29,947	29,225	32,223	34,224	34,241	32,963	30,861	33,316	29,678	27,010	31,624
1988/89	29,014	30,628	27,140	27,120	30,524	30,583	31,436	30,181	25,943	27,253	25,095	25,990	28,392
1989/90	24,437	28,950	31,701	29,411	32,250	32,605	29,648	27,938	25,696	28,122	25,717	26,904	28,615
1990/91	23,982	27,622	26,822	24,359	26,537	28,560	28,100	24,927	20,833	24,500	25,581	27,373	25,766
1991/92	27,454	30,136	27,324	28,778	28,994	29,915	30,059	26,586	21,096	23,688	25,821		27,259

Source: Association of American Railroads.

Appendix table 20--Rail freight rate index for grain, crop years 1979/80-1991/92

Year	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Average
December 1984=100													
1979/80	64.2	69.5	69.6	70.2	70.2	71.4	70.5	72.7	72.8	73.3	76.6	76.9	71.5
1980/81	78.3	78.8	78.8	79.2	83.1	84.1	85.0	84.8	84.8	85.7	88.0	88.5	83.3
1981/82	88.5	89.4	89.4	89.4	93.6	93.6	93.6	93.6	93.6	93.6	93.6	93.6	92.1
1982/83	93.0	93.0	93.0	93.0	93.9	93.9	93.9	93.9	93.9	93.9	93.9	93.9	93.6
1983/84	93.9	94.2	94.2	94.2	98.0	98.0	98.0	98.0	98.0	98.0	98.4	98.4	96.8
1984/85	98.4	100.0	100.0	100.0	100.0	100.0	99.3	99.3	98.7	97.3	96.4	96.3	98.8
1985/86	98.0	98.0	98.0	98.0	98.9	99.0	99.0	99.1	99.2	99.2	99.2	99.2	98.7
1986/87	99.2	98.5	98.5	97.8	98.3	98.3	98.8	98.6	98.5	98.6	98.6	98.5	98.5
1987/88	98.9	99.2	99.1	98.5	101.2	101.2	101.4	102.7	104.1	104.3	106.4	109.3	102.2
1988/89	109.3	108.3	108.5	108.2	109.2	109.2	108.8	108.8	108.8	108.0	108.4	108.4	108.7
1989/90	108.4	108.6	108.7	108.7	109.1	109.1	109.1	109.7	109.7	109.2	109.7	110.5	109.1
1990/91	110.6	111.3	111.3	111.3	111.0	111.0	112.5	112.0	111.2	109.9	110.8	110.8	111.1
1991/92	110.8	111.6	111.3	111.3	111.4	111.6	110.8	110.5	110.2	110.4	110.4		110.9

Source: Bureau of Labor Statistics, U.S. Department of Labor.

Appendix table 21--Hay (all): Acreage, supply, and disappearance, 1985/86-1992/93

Item	Unit	1985/86	1986/87	1987/88	1988/89	1989/90	1990/91	1991/92	1992/93
Acreage harvested	Mil. acres	60.5	62.3	60.1	65.1	63.3	61.4	62.6	60.5
Yield per acre	Tons	2.46	2.49	2.45	1.94	2.30	2.39	2.45	2.43
Carryover (May 1)	Mil. tons	26.8	26.7	32.3	27.1	17.5	27.1	27.1	28.6
Production	"	148.7	155.4	147.5	126.0	145.5	146.8	153.5	146.7
Supply	"	175.5	182.1	179.8	153.1	163.0	173.9	180.6	175.3
Disappearance	"	148.8	149.9	152.7	135.6	135.9	146.8	152.0	NA
Roughage-consuming animal units (RCAU's)	Mil. units	80.5	78.3	76.3	75.5	75.5	75.5	76.8	78.4
Supply per RCAU	Tons	2.18	2.33	2.36	2.03	2.16	2.30	2.35	2.24
Disappearance per RCAU	"	1.85	1.91	2.00	1.80	1.80	1.94	1.98	NA

NA = Not available.

Appendix table 22--Hay: Average prices received by farmers, United States, by months, 1983/84-1991/92 1/

Year	May	June	July 2/	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	Average 3/
\$ / ton													
Alfalfa:													
1983/84	83.80	78.30	77.40	77.40	79.10	82.40	80.10	81.70	82.00	85.10	84.40	84.30	81.33
1984/85	87.10	80.10	75.60	72.80	73.90	76.70	74.30	77.50	76.20	76.40	75.80	76.70	76.93
1985/86	85.50	74.90	72.50	68.10	70.70	70.50	67.70	69.10	70.20	71.30	72.00	69.80	71.86
1986/87	69.50	64.10	61.40	60.10	58.80	59.90	57.90	60.70	58.80	61.10	62.80	67.90	61.92
1987/88	76.30	66.90	65.10	66.30	67.60	67.70	63.70	67.40	66.50	69.60	72.50	76.90	69.31
1988/89	84.50	81.90	87.90	86.10	87.30	90.30	92.20	94.40	96.70	99.40	105.00	107.00	93.83
1989/90	105.00	96.50	89.90	87.50	91.20	89.80	91.30	92.50	93.30	95.20	96.70	103.00	93.80
1990/91	104.00	92.60	89.40	86.30	89.20	90.70	85.70	84.60	84.20	84.80	85.90	92.10	86.60
1991/92	88.50	79.40	74.50	74.60	72.00	71.80	72.80	72.90	74.20	76.10	73.70	74.70	75.30
1992/93	80.20	80.00	78.20										
Other hay:													
1983/84	58.90	56.10	54.30	52.90	57.80	59.50	62.10	64.30	63.30	63.80	64.90	66.50	60.37
1984/85	64.90	63.40	61.80	60.90	62.40	62.00	62.60	64.80	64.80	64.70	61.70	58.40	62.70
1985/86	58.70	54.00	57.00	58.40	58.60	58.20	55.30	56.00	56.10	56.00	54.80	54.90	56.50
1986/87	54.00	50.90	50.00	51.00	52.70	50.00	49.70	49.40	48.10	50.90	48.30	48.20	50.27
1987/88	51.90	50.80	49.60	51.00	51.80	51.10	52.30	51.10	52.20	51.50	51.70	51.90	52.09
1988/89	59.30	62.00	65.10	68.10	68.90	69.00	70.00	69.50	70.00	72.10	73.60	76.70	70.03
1989/90	78.80	69.00	63.60	63.10	66.10	62.80	63.00	63.00	64.00	62.50	63.70	65.10	65.50
1990/91	66.10	62.90	60.40	62.90	63.20	63.50	63.60	62.40	61.30	60.20	61.60	60.20	65.10
1991/92	60.60	57.40	55.30	59.90	56.60	58.40	59.40	57.30	55.70	57.80	58.60	64.30	61.80
1992/93	56.10	61.00	55.20										
All hay:													
1983/84	78.10	72.70	71.20	71.20	74.70	76.80	75.10	76.70	76.60	78.70	79.40	79.80	75.80
1984/85	82.50	76.10	72.40	70.40	70.70	73.10	71.40	73.40	73.00	73.10	72.20	72.50	72.70
1985/86	80.80	70.20	67.90	65.20	67.10	67.50	64.30	65.40	65.80	66.70	67.10	66.20	67.60
1986/87	66.70	61.00	58.80	58.20	57.60	57.90	56.00	57.70	56.10	58.50	59.20	64.10	59.70
1987/88	71.70	62.90	61.20	62.70	64.10	64.20	61.10	63.20	62.80	64.60	67.20	71.40	65.00
1988/89	79.70	77.00	81.60	81.40	82.90	85.10	86.40	87.60	89.50	91.80	96.90	101.00	85.20
1989/90	100.00	90.20	83.40	81.60	85.70	83.20	83.20	83.50	84.90	85.70	87.50	95.00	85.40
1990/91	96.00	85.00	81.60	81.00	83.20	84.00	80.40	78.70	77.90	77.80	80.50	87.30	80.60
1991/92	83.70	74.50	70.20	71.50	68.10	68.90	69.10	68.40	69.00	70.60	70.10	73.00	71.00
1992/93	74.20	75.50	71.80										

1/ Revised prices reported for mid-month. 2/ July 1992 data are preliminary. 3/ U.S. season average prices weighted by monthly marketings.

Source: Agricultural Prices, Agricultural Statistics Board, USDA.

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